

PROMOTING RESILIENCE AND WELL-BEING
FOR INDIGENOUS ADOLESCENTS IN CANADA:
*CONNECTING TO THE GOOD LIFE THROUGH AN OUTDOOR ADVENTURE
LEADERSHIP EXPERIENCE*

by

Stephen D. Ritchie

A thesis submitted in partial fulfillment
of the requirements for the degree of
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Abstract

Background: Promoting mental health for Indigenous youth in Canada is a well-documented priority. Indigenous approaches to health promotion share similarities with the holistic process in outdoor adventure and experiential education contexts. The purpose of this study was to develop, implement, and evaluate an Outdoor Adventure Leadership Experience (OALE) for Indigenous adolescents from one First Nations community in Northeastern Ontario, Canada.

Methods: Principles of community-based participatory research were used to guide this mixed method study that included three phases. Phase 1 involved the development of a culturally relevant OALE intervention. The intervention was available to adolescents, aged 12-18 years, living in Wikwemikong Unceded Indian Reserve. Phase 2 consisted of a quantitative evaluation of the effectiveness of the OALE, based on participant self-report. It focused primarily on assessing resilience using the 14-Item Resilience Scale (RS-14). Using an ethnographic approach, Phase 3 comprised a qualitative evaluation of the ways in which the OALE promoted resilience and well-being.

Results: Phase 1 occurred over a period of 10 months (September 2008 to June 2009), and it resulted in the development of an intentionally designed 10-day OALE program. The program was implemented in the summer of 2009 and 2010 with 73 adolescent participants, aged 12-18 years. Results from Phase 2 revealed that there was a 3.40 point increase in mean resilience for the adolescent participants at one month post-OALE compared to one day pre-OALE ($n=46$, $p=.011$), but the improvement was not sustained one year later. Phase 3 results revealed that the OALE facilitated the development of resilience and well-being by helping the adolescents connect to Anishinaabe Bimaadziwin, an Ojibway concept that can be translated as the *Good*

Life. Connecting involved an external experiential process of connecting *with* various aspects of creation and an internal reflective process of connecting *within* to different aspects of self.

Conclusion: The OALE appears to be a program that helped the adolescents: (1) become more resilient in the short-term, and (2) become more aware of Anishinaabe Bimaadziwin (the Good Life) by providing opportunities for connecting with creation and self through a variety of experiences and reflections that were unique for each youth.

Keywords

Resilience; Adventure Therapy; Outdoor Education; Community-Based Participatory Research; Expedition Ethnography; Mental Health; North American Indians; Aboriginal Health; Indigenous Health; Holistic Health; Adolescents; Youth Development; Rural and Northern Health

Co-Authorship Statement

This thesis follows the Integrated-Article option as per the policy in the School of Rural and Northern Health Student Handbook 2013-14. There are six papers included in this thesis, and each paper includes co-authorship by members of my PhD Committee and collaborators from Wikwemikong Unceded Indian Reserve. I am the first author on all six papers, since I was the principal investigator and primarily responsible for the content of each paper. As first author, I was also primarily responsible for writing the initial draft manuscript and editing the final version after co-author contributions and feedback had been received.

The other co-authors contributed in a variety of significant ways including: (1) design of the study; (2) coordination of data collection in the community of Wikwemikong; (3) analysis, synthesis, and interpretation of data; (4) contribution of content to each paper; and (5) editing drafts and revisions (as required by journals). The four papers that are included in the body of the thesis (Chapters 2, 3, 4, and 5) were all submitted for publication in academic peer-reviewed journals. The final two papers appear in the appendices and were submitted for publication to a provincial journal that did not include a peer-review process.

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I would like to thank all of the youth from Wikwemikong who participated in the OALE and dedicated additional time and expertise towards this research. This project would not have been possible without the guidance, expertise, and leadership of many other people in Wikwemikong. Mary Jo Wabano, Health Services Director, was instrumental in the early development of the OALE program and research, and she has been the community champion for the program since inception. Lawrence Enosse, Brighter Futures Manager, has been responsible for planning and implementing the program since 2010. His leadership has ensured program continuity, fidelity, and growth over the past four years. Former Wikwemikong Chief, Hazel Fox-Recollet, supported the initial OALE development, implementation, and research. Current Wikwemikong Chief, Duke Peltier, co-led the initial pilot project in 2008, and his ongoing support and leadership has helped the OALE become a well-established community-led program. The OALE program development and research has also benefited tremendously from the ongoing support and guidance of community Elder, Rita G. Corbiere. Her cultural knowledge and wisdom ensured that the OALE program was culturally relevant and credible. She was also my personal guide and mentor in the analysis and interpretation of the qualitative data.

Staff at the Waasa Naabin Community Youth Services Centre in Wikwemikong helped develop the program in 2008, and they have been planning, preparing, and facilitating the program each summer since 2009. Philip Green and Nimkii Lavell were the lead guides for most of the OALE excursions in 2009 and 2010; their wilderness skills, cultural knowledge, and leadership were key to ensuring that the travel groups were safe and that each youth had a positive experience in the field. Early on in the development of the OALE, members of the Community Research

Steering Committee guided various research activities, especially the compilation of scales used in the Health and Well-Being Questionnaire. Staff from the Nadmadwin Mental Health Clinic, and seniors and Elders from Amikook Seniors Centre provided many valuable ideas for the initial formation of the OALE program. The Health Services Committee and Chiefs and Council members in Wikwemikong have also provided ongoing support and encouragement that has been a key to the program sustainability over the past five years.

I would also like to thank my thesis supervisor, Dr. Nancy Young, and thesis committee members, Dr. Brenda Restoule and Dr. Keith Russell, for their ongoing support, encouragement, and critical feedback. My learning, growth, and development as a researcher have been under their guidance for the past five years. Two other colleagues, Dr. Robert Schinke and Dr. Bruce Oddson, provided additional support and guidance, over the years. The maps used in Chapters 1 and 5 were created by L.L. Larivière, a cartographer at Laurentian University. More recently, in the final stages of thesis preparation, I have appreciated the expertise of Kathy Brankley, as she edited the final manuscript. I would like to acknowledge my wife, Nathalie, and children, Tristan and Ixta, for their incredible love, support, and patience throughout my personal journey of education and self-discovery. Finally, I am humble and grateful to the Creator who made life possible. It is my hope that this thesis glorifies Him.

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List of Abbreviations Used

CBPAR	Community-Based Participatory Action Research
CBPR	Community-Based Participatory Research
CIHR	Canadian Institute of Health Research
CRSC	Community Research Steering Committee
CV	Community Values
ECHO	Evaluating Children’s Health Outcomes (Research Centre)
ES	Effect Size
FN	First Nations
FNIHB	First Nations and Inuit Health Branch
FS	Flourishing Scale
HWBQ	Health and Well-Being Questionnaire
IIC	Inter-Item Correlation
IK	Indigenous Knowledge
KT	Knowledge Transfer
MCS	Mental Component Score from the SF-12v2
MW	Medicine Wheel
NOLS	National Outdoor Leadership School
OAEE	Outdoor Adventure and Experiential Education
OALE	Outdoor Adventure Leadership Experience
OLTP	Outdoor Leadership Training Program
OB	Outward Bound
OBPM	Outward Bound Process Model
OCAP	Ownership, Control, Access, and Possession
OLTP	Outdoor Leadership Training Program
PCS	Physical Component Score from the SF-12v2
PGE	Post Group Euphoria
RS-14	14-Item Resilience Scale
SES	Self-Esteem Scale
SS	Social Support

SV	Spiritual Values
SWL	Satisfaction with Life Scale
SF-12v2®	12-Item Short-Form (Version 2) Health Outcome Survey
SPANE	Scale of Positive and Negative Emotion
T1, T2, T3	Time 1 (1-day pre-OALE); Time 2 (1-month post-OALE); Time 3 (1-year Post-OALE)
WEA	Wilderness Education Association
WHSC	Wikwemikong Health Services Committee
WUIR	Wikwemikong Unceded Indian Reserve

Chapter 1: Introduction

Stephen D. Ritchie

The mental health and well-being of Indigenous people in Canada is a major area of concern identified by health policy organizations throughout Canada, [1] and it is a focus area for health care renewal. [2] The mental health of Indigenous children and adolescents is concerning due to higher rates of mental illness and mental health problems, most particularly the alarming trend in youth suicides. [3, 4] Suicide prevention and mental health promotion initiatives designed for Indigenous communities must reflect their unique worldview that includes the notion of holistic health. Mental health is one component of holistic health, a concept that also includes physical, emotional, and spiritual dimensions. These four dimensions of health are often referred to as the circle of life or Medicine Wheel. [5, 6] The Medicine Wheel is one of the most common frameworks of Indigenous health across Canada, [7] and it is often used to guide health promotion activities in many Indigenous communities. It is important to acknowledge that there are many versions of the Medicine Wheel, and many different interpretations, but the core concepts remain consistent. These concepts are discussed in a subsequent section of this chapter.

The study described in this thesis focused on the collaborative development, implementation, and evaluation of a holistic health promotion intervention designed for Indigenous adolescents. The intervention was a 10-day outdoor adventure leadership experience that was intentionally

designed to promote resilience and well-being for the adolescent participants from one First Nations community in Northeastern Ontario, Canada.

1.1 Background

Indigenous people are often referred to as Aboriginal people in Canada.¹ Aboriginal populations in Canada include First Nations, Inuit, and Métis people collectively. These populations comprise 4.3% of the Canadian population, and they are dispersed across Canada. [8] The population of First Nations people forms 60.8% of all Aboriginal people in Canada. [8] Approximately half of the First Nations population live on reserves that are composed of distinct communities that are located in, or proximal to, their traditional territory. [8] Many First Nations communities are located in rural and northern regions, and these communities are usually surrounded by vast wilderness areas with abundant historical significance.

Wikwemikong-Laurentian Collaboration

This research project involved collaboration with leaders from a First Nations community in a rural area of Northeastern Ontario. Community leaders from Wikwemikong Unceded Indian Reserve on Manitoulin Island have partnered with researchers from Laurentian University in Sudbury, Ontario on many collaborative research projects for several years. Thus, a strong research-oriented relationship was well established and influenced the development of the current project. The inset map in Figure 1-1 indicates the proximity of Wikwemikong and the city of Sudbury in Northeastern Ontario. In 2002, Jacklin and Wabano [9] completed a youth needs assessment for the community that identified mental health promotion as one of the key

¹ The terms Indigenous and Aboriginal are broad and inclusive terms, referring to the native people of a land pre-contact. Both terms are used at different times in different sections and chapters of this thesis.

priorities. This influenced programming at the Waasa Naabin Community Youth Services Centre for the next decade. Staff at the Youth Centre implemented a variety of successful wilderness programs over several years, ending in 2005.

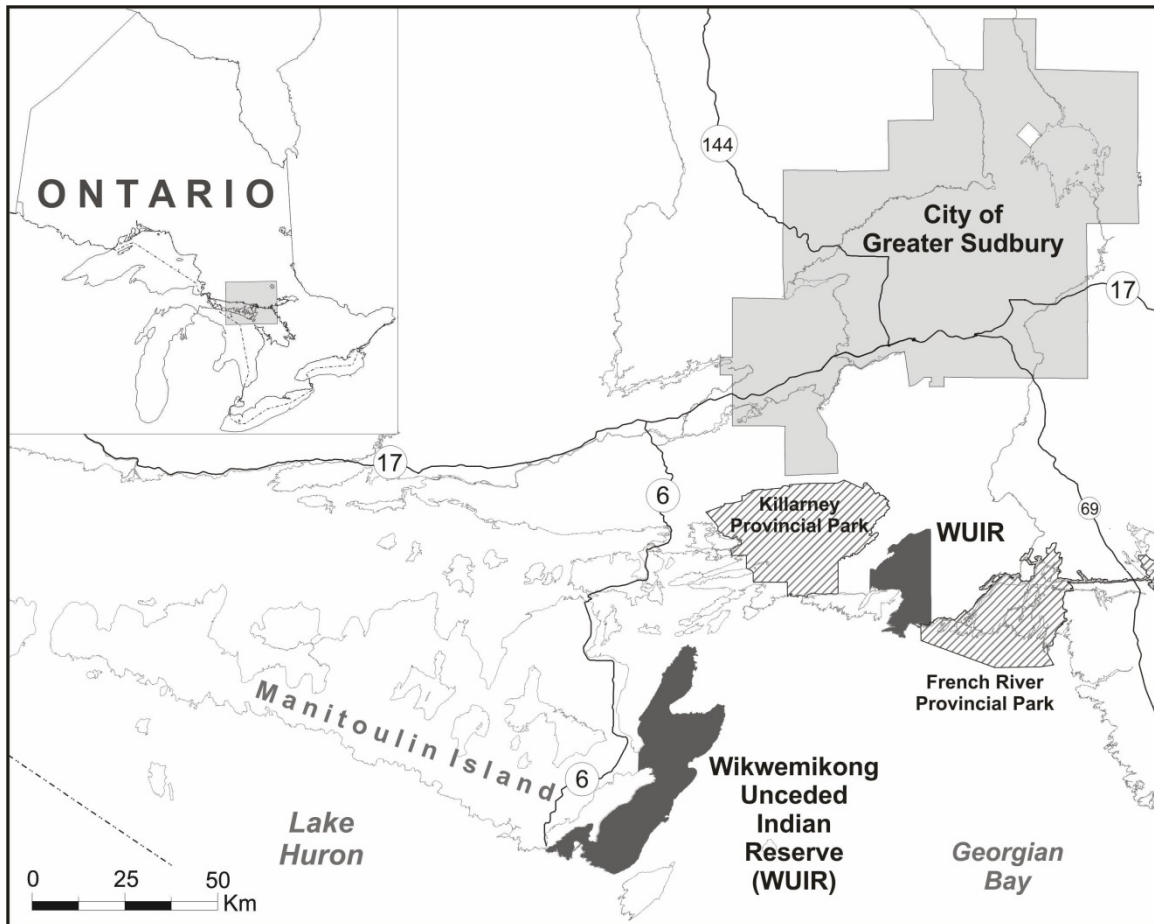


Figure 1-1: Regional map profiling Wikwemikong and Sudbury

From 2006 to 2008, I worked with Schinke and other colleagues from Laurentian University, in collaboration with Wikwemikong leaders, on a research project focused on adolescent participation and leadership in sport contexts. A number of papers were published from this work. [10-13] One of the outcomes from this earlier project was the development and implementation of a youth leadership training program for the community. [14] The program was comprised of six training modules developed collaboratively by Wikwemikong community

leaders and Laurentian University researchers over three years (2006-08) through a series of talking circles and community meetings. [10, 13] The program training modules were: The Essence of Leadership; Connecting to Aboriginal Roots and Culture; Creating a Personal Vision; Cultivating Persistence and Success; Working Effectively with Others; and Leaving a Legacy. [14] This earlier work led to a pilot program where I coordinated the delivery of the six modules experientially during a week-long wilderness canoe excursion in the summer of 2008. The events, experiences, and observations that occurred on this first canoe trip were germane to the evolution and development of this thesis project. Ultimately, Wikwemikong leaders had given priority to adolescent mental health, had prior experience with wilderness adventure programming, and had an existing leadership training program in place in the community that laid the foundation for the current research.

The Site

Wikwemikong Unceded Indian Reserve comprises 413 square kilometres, with a population of 2592. [15] Most of the population resides in several small communities on the eastern end of Manitoulin Island in the northern part of Georgian Bay, on Lake Huron. [16] Politically, Wikwemikong is one of 39 First Nations that belong to the Union of Ontario Indians. [17] The people of Wikwemikong self-identify as Anishinaabe, and they are citizens of the Three Fires Confederacy. The Three Fires Confederacy was a historic alliance of the Ojibway, Odawa, and Pottawatomi nations that existed during pre-colonial times and continues to this day. Sources from the Medewiwin tradition and other scholars suggest that during pre-colonial times in Canada, there was a slow migration of Anishinaabe people westward from their origins on the east coast of North America. [18, 19] At present, Wikwemikong has one of the largest First Nation reserve populations in Ontario. This First Nations community has a strong governance

system with a well-established infrastructure that supports many services such as education, housing, communication, policing, emergency services, and health.

Purpose of the Study

The intentional use of outdoor adventure experiences as therapy has received increased interest in the past two decades, [20] and there is mounting evidence of therapeutic benefits. [21-23]

However, there is very little evidence to guide the development of these types of therapeutic approaches for First Nations populations. It is important to understand the nature and magnitude of any therapeutic benefits associated with outdoor adventure for First Nations populations in Northeastern Ontario, what sub-groups derive the greatest benefit, and under what circumstances.

This study presents the use of outdoor adventure as an intentional programming tool to promote well-being for First Nations youth who live on reserve. This cohort has been identified as a high-risk age group within an at-risk population. [24-26] The programming focused particularly on the mental health component of well-being, to develop resilience as a protective factor. [27]

However, in keeping with the holistic framework of the Medicine Wheel, it was necessary to ensure that the outdoor adventure reflected all four dimensions (mental, spiritual, emotional, and physical) of holistic health since they are interconnected and interrelated. The purpose of the study was threefold: (1) to develop a culturally relevant outdoor adventure intervention that would promote resilience and well-being for youth from Wikwemikong; (2) to evaluate the experience to determine its effectiveness in terms of its impact on resilience and well-being; and if so, (3) to discover the key factors or mechanisms of the program that were associated with its effectiveness.

1.2 Literature Review

It was necessary to understand several disparate areas of the literature that combined to influence the three purposes of this study. First, it was important to understand the need for a focus on Indigenous adolescent mental health and resilience and how that focus needed to reflect the unique worldview of Indigenous people. This understanding was particularly important and relevant for the Wikwemikong context, in terms of health and health promotion. Second, it was necessary to understand the characteristics of the programs and the outcomes achieved in other outdoor adventure interventions designed for adolescents in other contexts. Finally, it was necessary to understand the definitions and contextual considerations of the targeted outcomes of *resilience* and *well-being* in order to develop a relevant, intentional, and effective outdoor intervention.

Indigenous Mental Health Promotion

It is clear from the literature that mental health and suicide are critical issues for Indigenous people across Canada. [1, 25, 28] There are higher rates of anxiety and depression in the Indigenous population compared to the Canadian population, [1] and higher substance use and abuse rates are well documented. [29] Suicide rates in First Nations populations are double the Canadian rate, [26] and youth suicide rates are even higher than rates for adults, with rates for youth aged 15 to 24 years, at five times the national average. [3, 26] Perhaps even more alarming is that in the year 2000, suicide and self-injury were the leading cause of death for First Nations youth and adults up to 44 years. [26] Since most health-related data is aggregated at a national level, [29, 30] data related to rates of anxiety, depression, substance use, and suicide were unavailable for the Wikwemikong community. However, the 2002 *Wikwemikong Youth Needs Assessment* did provide some insight into some of the self-reported health needs in

Wikwemikong youth. [14] Thus, community leaders had some local data to confirm that youth mental health promotion and suicide prevention needed to be priorities for Wikwemikong.

The importance of developing strategies to promote mental health and prevent suicide amongst Indigenous people in Canada is a well-documented priority. [31-35] It is also a priority for Indigenous people in other nations in the world. [36, 37] In Canada, a federally sponsored task force, under the direction of former National Chief of the Assembly of First Nations Matthew Coon Come and former Minister of Health Allan Rock, met to discuss the First Nations youth suicide issue in 2001. [24] The result of this work was a report entitled *Acting On What We Know: Preventing Youth Suicide in First Nations*. [24] This comprehensive report emphasized the importance of developing strategies to prevent youth suicide which are holistic and rooted in a cultural approach that is community-driven and that uses strategies for building youth identity and resilience. [24] Kirmayer and colleagues also supported this type of approach. [25] More recently, the Canadian territory of Nunavut released a comprehensive suicide prevention strategy that referenced the effectiveness of land-based programs for youth. [38] Recommendations for Indigenous mental health promotion and suicide prevention highlight the need to target youth using strategies that are land-based and include a holistic community-driven approach to build identity, resilience, empowerment, and culture. [1, 24, 25, 31-33, 38]

Mental health promotion in Wikwemikong also includes the advancement of physical, emotional, and spiritual health in a holistic manner. This holistic approach also reflects a broad relational context that not only includes the health of the individual, but the health of friends, family, community, and all of nature. This inclusive interconnected approach to health promotion reflects a unique worldview that is characterized by a sense of balance and harmony within a person, a family, a community, and all of creation. [5, 39-43] The Medicine Wheel is a common

framework that reflects this holistic approach to health promotion.

The Medicine Wheel represents the cosmic order in the universe and symbolizes the unity of all things or ideas, either seen or unseen. [5] Hill used the Medicine Wheel to represent a sense of belonging or relatedness that unifies and connects persons with their environment. [39] Rheault suggested that the Medicine Wheel helps a person understand the complexity of creation by portraying it in manageable pieces to aid in comprehension and growth as a person. [41]

According to Hart, the Medicine Wheel symbolizes order in the universe, and this is reflected in a sense of wholeness, balance, relationships, harmony, and growth. [5] The four quadrants of the Medicine Wheel represent wholeness and balance. Harmony is reflected in the “relationships of all the various powers, energies, and beings of the cosmos, and when everyone, human, animal, plant, fulfills their obligations and goes about their proper business.” [5, p. 94] The Medicine Wheel is not a static depiction since the concepts of growth and healing imply a dynamic process, or a life journey, that includes oneself, situated within a context that includes other relations and all aspects of creation. Thus, the Medicine Wheel was deemed by the research team to be particularly useful as a health promotion framework in complex outdoor contexts.

There are many different versions of the Medicine Wheel in use by First Nations communities across Canada, [7] with dimensions of health appearing in different quadrants according to the teachings and traditions in each community. Figure 1-2 illustrates a simple version of the Medicine Wheel (or wheel of life) health framework as viewed by many community leaders and health professionals in Wikwemikong. The Medicine Wheel is the main framework supporting health promotion programming through the Nahndahweh Tchigehgamig Health Centre and the Nadmadwin Mental Health Clinic in Wikwemikong. It is also the holistic framework that influences the weekly, monthly, and seasonal schedule of programming offered through the

Wassa Naabin Community Youth Services Centre in Wikwemikong.

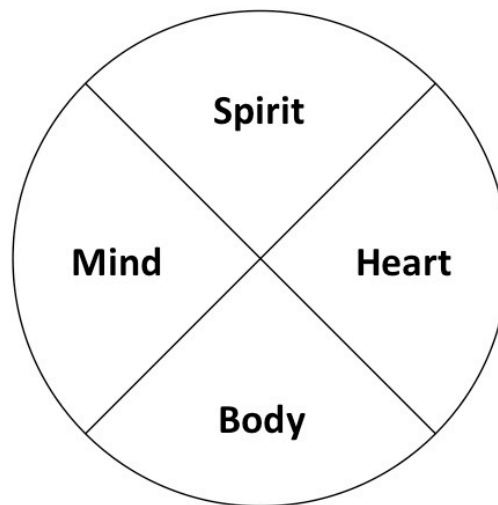


Figure 1-2: The Medicine Wheel health framework used in Wikwemikong

Outdoor Adventure and Experiential Education (OAEE)

The Medicine Wheel framework and recommended strategies for Indigenous youth mental health promotion appear to be concordant with the characteristics of many outdoor adventure [44-46] and experiential education programs. [47-49] Popularized by organizations such as Outward Bound (OB), [50] the National Outdoor Leadership School (NOLS), [51] and the Wilderness Education Association (WEA), [52] the use of outdoor adventure, education, and leadership development in natural environments results in therapeutic benefits with measurable outcomes in many areas related to mental health. Some of the aspects of mental health where positive outcomes have been measured are: self-esteem, self-efficacy, self-concept, resilience, leadership, and life effectiveness. [21, 22, 53-59]

Many of these outdoor organizations – such as OB, NOLS, WEA, and others – use a wilderness expedition model of programming. The expedition environment is a holistic immersive

experience for a small group of participants. Usually, both individual effort and team work are required to overcome a diverse array of natural challenges and obstacles. Programs typically range in length from 3 to 45 days and even longer, but most frequently are in the range of one to three weeks (~5 to ~23 days). The expeditionary model used by these organizations could generally be described as outdoor adventure and experiential education (OAEE). Kurt Hahn, one of the earliest pioneers of OAEE, was originally a German educator who established OB in the United Kingdom in 1941. [60] The original OB concept and model has evolved and expanded to over 30 countries on six continents throughout the world. [60] OB has also had a significant influence on the development of similar organizations such as NOLS and WEA. Although it developed from non-Indigenous origins, OB may have some general cross-cultural applicability (or transferability), given its popularity and expansion to a broad variety of countries (and cultures) in the past 70 years. Thus, understanding the OB process is important to this research.

The comprehensive OB process was simplified and described succinctly by Walsh and Golins in 1976. [61] The Outward Bound Process Model (OBPM) is a conceptual framework that describes the process from the perspective of an Outward Bound participant or learner: A “learner is placed into [a] unique physical environment and into [a] unique social environment then given a characteristic set of problem-solving tasks [resulting in] a state of adaptive dissonance which he [or she] adapts [to] by mastery which reorganizes the meaning and direction of [the] learner’s experience.” [61] The outcome of this process is that the learner “continues to be *outward bound* oriented to living and learning.” [61] Essentially, this model captures the key components of an OB experience, which includes many of the elements that led to the organization’s popularity, expansion, and influence over the past seven decades. The OBPM was an important framework used in this study. Figure 1-3 displays the OBPM graphically.

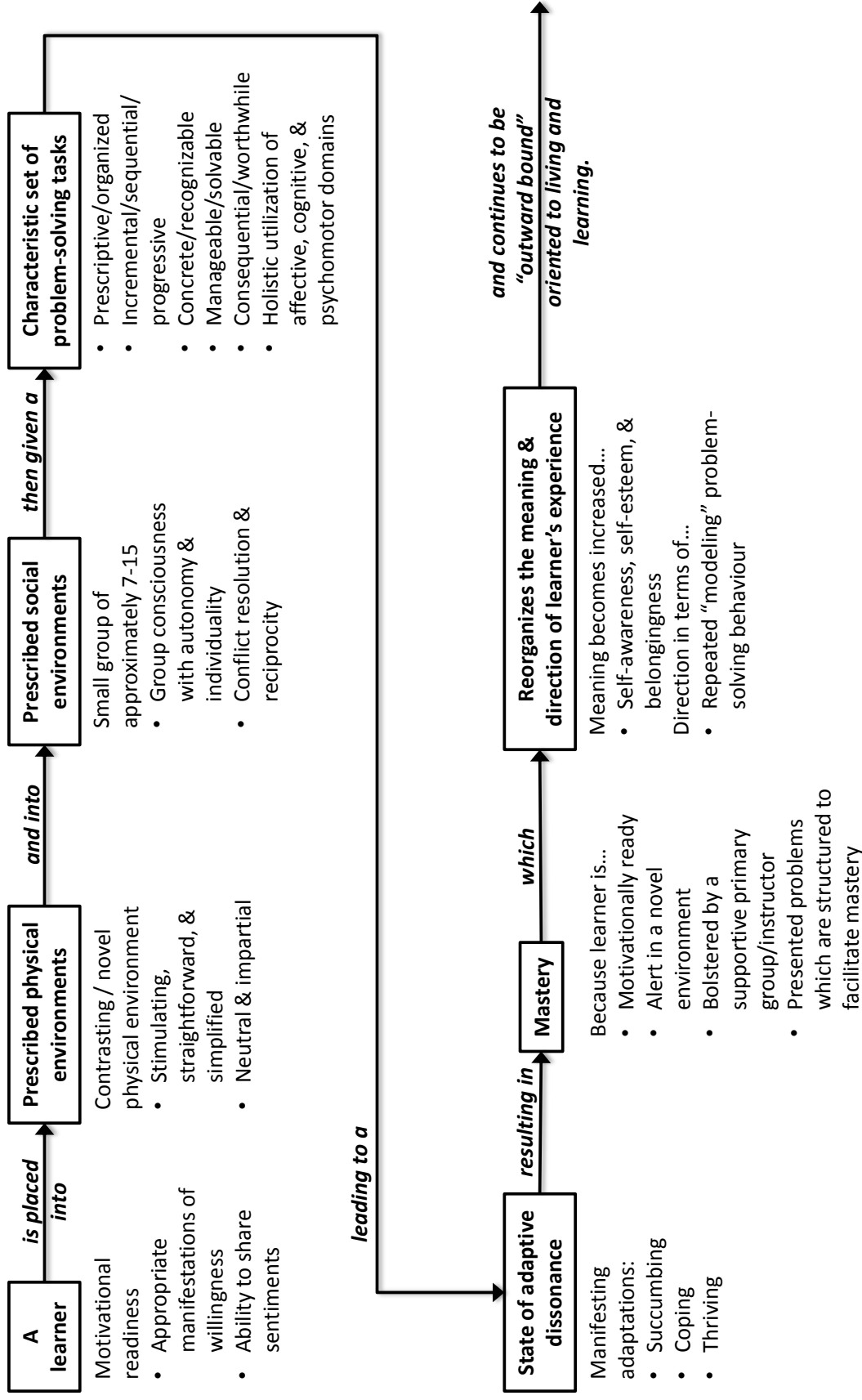


Figure 1-3: The Outward Bound Process Model framework [61]

Core to the relevance of the OBPM and many outdoor adventure activities are principles of experiential education and learning transfer, which enable a client (participant) to change and evolve. This change process is also the essence of therapeutic outcomes derived from outdoor experiences, and it requires further exploration in order to facilitate a more complete understanding of OAEE and how it may work.

Experiential Education and Metaphoric Learning

The roots of experiential education are most often linked to the theoretical work of John Dewey [62] who believed that education and experience are inextricably linked and that genuine education only comes about through the act of experiencing. Currently, there are many contemporary perspectives of experiential education, [63] and numerous models of the experiential learning process have been developed over the past three decades (see Priest and Gass, 2005 for a review). [64] Perhaps one of the simplest definitions of experiential education is “learning by doing combined with reflection.” [64, p. 16] According to Priest and Gass [64] and other authors [65, 66], experiential education and learning transfer are at the heart of an OAEE.

In 1983, Stephen Bacon published an influential text entitled *The Conscious Use of Metaphor in Outward Bound*. [67] At the time, this work captured some of the current thinking about OAEE that suggested that some of the most significant experiential learning, derived from outdoor programs such as OB, was achieved through an indirect learning process from embedded metaphoric processes within the experience itself. [67] Two years later, Gass described the process of programming in outdoor adventure and incorporated metaphoric learning as one of three types of learning transfer: specific, non-specific, and metaphoric. [68] In 1987, Bacon summarized the evolution of OB and promoted the *experiential metaphoric model* as a direction for future curriculum development. [69] From these earlier works, other outdoor-oriented

scholars expanded metaphoric learning, operationalizing it in very prescriptive ways that could be used in outdoor adventure and therapeutic contexts. [70-81]

Models of outdoor adventure, experiential education, and metaphoric learning seem to reinforce the natural path of learning inherent in the Indigenous way of living and learning, based on a unique worldview. [82, 83] Aboriginal scholar Castellano posited that “knowledge valued in Aboriginal societies derives from multiple sources, including traditional teachings, empirical observation, and revelation... Aboriginal knowledge is said to be personal, oral, experiential, holistic, and conveyed in narrative or metaphorical language.” [82, p.25] Both experiential education and metaphoric learning seem to reflect the Indigenous approach to gaining knowledge and learning. Thus, metaphorically framed outdoor experiences appear to have potential as a culturally appropriate mechanism to teach, develop leadership, and promote resilience and well-being for Indigenous youth.

OAE as Therapy

To further understand the impact OAE may have on resilience and well-being, it is helpful to view the process as therapeutic. The intentional use of outdoor adventure and wilderness as a form of therapy has received increased interest in the past two decades. [20, 44, 84-90] There is not yet consensus on the definition of adventure therapy; it has been described in the literature by a variety of terms such as wilderness therapy, [86, 87, 89] adventure therapy, [20, 88, 91] and even adventure-based counselling. [92, 93] Perhaps one of the simplest and most inclusive definitions of adventure therapy was proposed by Alvarez and Stauffer as “any intentional, facilitated use of adventure tools and techniques to guide personal change toward desired therapeutic goals.” [84, p. 87] However, more recently Gass, Gillis, and Russell defined adventure therapy as “the prescriptive use of adventure experiences provided by mental health

professionals, often conducted in natural settings that kinesthetically engage clients on cognitive, affective, and behavioral levels.” [20, p. 1] This more restrictive definition reflects a medical model that differentiates adventure therapy as an intentionally designed experience facilitated by mental health professionals. The distinction between these two definitions is important, because it highlights a difference in perspective that suggests that there are many different types of outdoor programs and interventions that reflect different therapeutic approaches.

In 2000, Berman and Davis-Berman [85] provided a simple view of adventure therapy as either incidental or intentional growth, a perspective that seems to intuitively mitigate the difference in definitions. Using their perspective, outdoor adventure can be viewed on a continuum of either incidental or intentional growth with respect to an experience or program. Growth is considered to be the therapeutic outcome. Figure 1-4 illustrates this continuum with examples of some types of outdoor-related experiences and where they may fit in relation to each other. [85] An OAEE designed to enhance Indigenous youth resilience and well-being would be more intentional than incidental. Nevertheless, whether therapy is incidental or intentional, there are therapeutic outcomes and health benefits that accrue for participants of an OAEE. [53, 85] Recently Gass, Gillis, and Russell referred to the OBPM as a theoretical framework to explain the process of adventure therapy. [20] They identified empirically grounded factors and summarized them as 30 ingredients corresponding to the seven process steps in the OBPM. [20] This synthesis of empirical factors increases the usefulness and credibility of the OBPM as a foundational framework for program development.

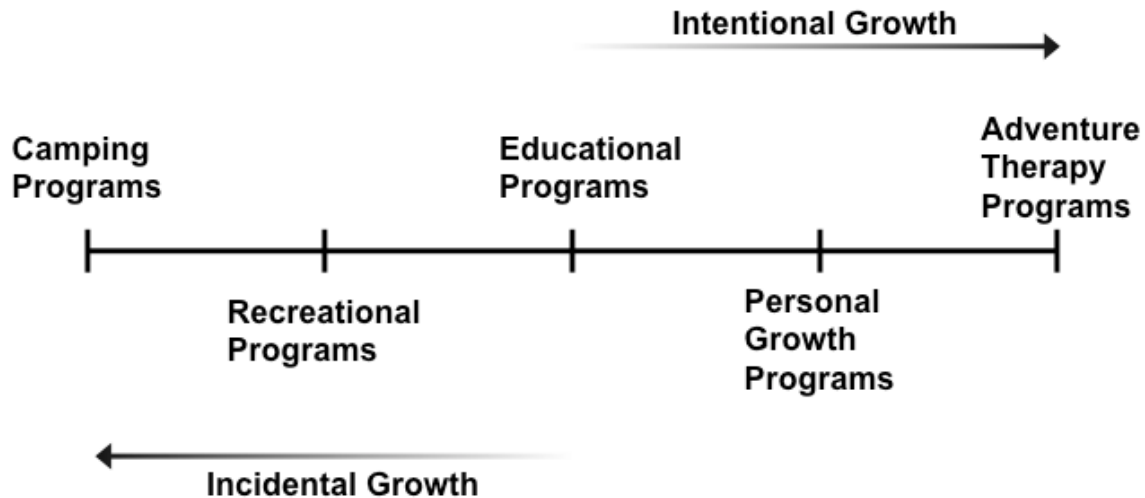


Figure 1-4: The therapeutic adventure continuum [94]

Outcomes from OAEE

Many outcome studies were completed in outdoor adventure education over the past few decades, with several meta-analyses completed in the late 1990's. Perhaps one of the most cited examples in the literature, Hattie et al. compiled 96 adventure education studies with a pooled sample of over 12,000 participants. [53] The overall effect size (ES) was 0.34. [53] Surprisingly, there was also a subsequent ES of 0.17 (up to 18 months after the experience) which suggested ongoing improvement beyond the initial program or intervention. [53] An ES represents a mathematical method for combining results from many different studies, and although interpretations vary, an ES greater than zero indicates positive outcomes and an ES less than zero indicates negative outcomes. Cohn suggested interpreting ES with the following benchmark descriptors: small (0.2), medium (0.5), and large (0.8). [95] According to Neill and Richards, [21] who compared this result with two other similar meta-analyses in outdoor education (ES of 0.31 and 0.38), the overall results translated into a small to medium effect as a combined average (for the studies included). [21]

These meta-analyses also revealed information about the characteristics of programs and the types of outcomes with higher ES's. [21] Neill and Richards concluded that the following four program characteristics likely had the most influence on outcomes (ES's): (1) design and facilitation; (2) longer programs; (3) programs delivered to adult populations; and (4) adventure therapy approaches. [21] A recent large-scale meta-analysis focused only on adventure therapy programs confirmed the fourth finding. [23] Bowen and Neill found an ES of 0.47 for adventure therapy programs compared to an ES of 0.14 for alternative treatment and 0.08 for no treatment. [23] This study also revealed higher effects for studies using clinical scales and self-concept measures. In Neil and Richard's review, they claimed that outdoor education programs can trigger a cycle of personal growth related to outcome variables such as self-concept, self-confidence, and locus of control. [21] In the Hattie et al. study, the major benefits (ES's) were relatively consistent across the six broad outcome categories (leadership, self-concept, academic, personality, interpersonal, and adventuresome), however the greatest effects were related to a theme that the authors described as self-control. [21] In other words, the adventure programs in this study seemed to be most effective at helping the participants with self-regulation.

Finally, Gass, Gillis, and Russell summarized 13 different meta-analysis and systematic reviews related to outcomes in therapeutic adventure. [20] They concluded that "these reviews and meta analyses show that past studies have focused on two primary effects on participants: (1) the positive and significant development of self-concept from participation in an AT [adventure therapy] intervention, and (2) the development of adaptive and social skills due to the unique group-based treatment milieu." [20, p. 291]

There are limitations to the evidence reported from meta-analyses and systematic reviews. These include problems associated with combining various methodologies, different populations, and

diverse outcome measures. There is also a chronic lack of outcome reporting in outdoor education research, and a further possibility of publication bias since studies without significant outcomes may not have been published and hence not included in the compiled ES's.

Despite these criticisms, other outcome studies from targeted wilderness therapy programs that have focused specifically on youth-at-risk populations (youth with psychosocial and behavioural disorders, and adjudicated youth in closed custody programs) have consistently demonstrated positive outcomes with common mental health indicators such as self-efficacy, effective behavioural functioning, interpersonal relations, and effective social functioning. [96-99]

Although individual Indigenous adolescents in a First Nation are not necessarily youth at risk, they are from a population at risk. Hence, they are a vulnerable population that could benefit from similar outdoor-oriented approaches. Though none of the cited outdoor-related outcome studies have focused on this particular population directly, resilience has been identified as a protective factor for at-risk populations and Indigenous youth in particular. [24, 25, 27, 33] In non-Indigenous contexts, resilience has recently become an outcome variable of interest in outdoor adventure research. [58, 100-110]

Promoting Resilience and Well-being through OAEE

The concept of resilience can be characterized by the metaphor of elasticity, in that a resilient individual has the capacity to *bounce back* or *spring back* after change and misfortune. [111]

Resilience scholar Michael Rutter described resilience as the “relative resistance to psychosocial risk experiences.” [112, p. 119] Wagnild defined resilience “as the ability to successfully cope with change and misfortune.” [113, p. 15] Resilience has been described in the literature as a concept and construct, [111] a personality characteristic, [114] and both a process and an outcome. [115]

In the past decade, scholars have examined resilience in a broader social and cultural context. [116-123] Ungar argued that since resilience develops when risk factors are present, it is important to view the concept through a broader social ecological lens that is influenced by cultural context and other environmental factors external to the individual. [122] Based on a qualitative study of resilience across cultures, Ungar described this social ecological perspective using seven tensions that helped explain resilience for 7 Aboriginal and 12 non-Aboriginal youth in Canada: (1) access to material resources; (2) access to supportive relationships; (3) development of a desirable personal identity; (4) experiences of power and control; (5) adherence to cultural traditions; (6) experiences of social justice; and (7) experiences of a sense of cohesion with others. [124] Resilience for the 19 youth in this study was described as the different degrees of access they had to these seven mental health enhancing experiences (tensions). [124]

Many scholars have also examined resilience further within an Indigenous context. [27, 83, 125-130]. Kirmayer presented a unique socio-ecological view of Indigenous resilience that is historically rooted to a specific place for Indigenous people. [83] Other scholars have also taken this holistic ecological perspective of resilience in non-Indigenous contexts. These perspectives connect the concept of resilience to well-being [129, 131-134] and nature. [135, 136] These broader holistic, ecological, social, and cultural approaches to the concept of resilience are particularly appropriate for this study because they align with some of the characteristics implicit in the Medicine Wheel and OBPM frameworks. For example, the Medicine Wheel framework includes a holistic view of health that reinforces the importance of the relationship of an individual with nature, family, and the broader community. Similarly, the OBPM reflects a contextual process wherein an individual is embedded in a prescribed social and physical environment in a process that leads towards growth and positive outcomes.

Beyond the aforementioned definitions and perspectives of resilience, there is a plethora of scholarly work examining resilience in adolescents. [111, 115, 137-142] Within the adolescent context, resilience is often characterized by the development of positive protective factors in the face of adversity, risk, and negative experiences. [111, 143, 144] Resilience was an important construct for this study since it has been identified as a priority for Indigenous youth mental health promotion and suicide prevention, [24, 25] and it is considered a protective factor for positive youth development. [111] Well-being was also an important construct for this study because it is conceptually related to resilience in Indigenous contexts, [129, 131, 133, 134] and it reflects the Medicine Wheel framework used for health promotion programming in Wikwemikong.

Frameworks and Research Questions

The OAEE described in the literature reflected outdoor experiences that were designed so that the process led to positive outcomes for the participants. The OBPM was the main framework that characterizes the process involved in an OAEE, and the Medicine Wheel was a culturally appropriate framework used for health promotion and prevention programs in Wikwemikong. Thus, this study used the OBPM and the Medicine Wheel as frameworks for the development of an outdoor adventure leadership experience (OALE) as an intentionally designed intervention that was unique and proprietary to the community of Wikwemikong. Appendix A contains a published paper describing the OBPM and Medicine Wheel frameworks in more detail. The review of literature, and the decision to use these two frameworks, led to several related research questions with respect to the development, implementation, and evaluation of an OALE specifically designed for First Nations adolescents from Wikwemikong Unceded Indian Reserve in Northeastern Ontario, Canada:

(1) What is a culturally relevant OALE?

(2) Does the OALE intervention promote resilience and well-being for Wikwemikong youth? and if so,

(3) How does the OALE promote resilience and well-being?

There were also two supplementary questions related to the impact of the OALE over time.

These questions addressed whether any changes in resilience and well-being were sustained over 12 months, and to what extent participants would attribute any changes to the OALE or other intervening factors:

(4) Are any changes in resilience and well-being sustained?

(5) To what do participants attribute changes in their resilience and well-being?

The comprehensive development, implementation, and evaluation of an OALE, relevant to the Wikwemikong community, spanned several years (2008-2012). This process was guided by a comprehensive methodology and research design. The OALE program is described further in each of the subsequent chapters of this thesis, however a more detailed description of the OALE intervention appears in Appendix F.

1.3 Methods Overview

This research adhered to principles of community-based participatory research (CBPR). [145-147] CBPR has been defined as a partnership approach to research that equitably involves community members and outside researchers in a collaborative process where all partners contribute expertise and share decision making and ownership of the process and results. [148] Similarly, the purpose of CBPR is to generate knowledge and then integrate that knowledge in pragmatic ways that will have immediate and direct benefit for the community involved. [148]

There are numerous examples of CBPR approaches that have been adapted to meet the unique needs and contexts of Indigenous communities. [149-155]

The philosophical assumptions of a participatory worldview were described by Creswell as a focus “on the needs of groups and individuals in our society that may be marginalized or disenfranchised.” [156, p.9] This research project involved a non-Indigenous researcher leading research with a vulnerable age group (youth) within a marginalized population (First Nations community). Thus, the research process also required reflexivity [157, 158] and an awareness of positionality. [159-161] Reflexivity and positionality are important concepts that are discussed in detail in subsequent chapters where they are more relevant within the context.

Research Design Overview

The study adhered to principles of CBPR and used a concurrent transformative mixed method design. [156] The study contained three phases: (1) Collaborative development of a culturally relevant OALE that was appropriate for youth in Wikwemikong; (2) Evaluation of the impact of the OALE on the resilience and well-being of youth who participated in the program using a self-report questionnaire package administered one day before, one month after, and one year following the OALE; (3) Analysis of how the OALE process functioned to promote resilience and well-being and whether any intervening factors had any impact during the year following the OALE. Phase 2 and 3 occurred concurrently, and all three phases were transformative since the study adhered to principles of CBPR. Qualitative methods were used in Phase 1 and 3; quantitative methods were used in Phase 2. Figure 1-5 illustrates the research design graphically. Further design features and details relevant to each phase are provided in subsequent chapters.

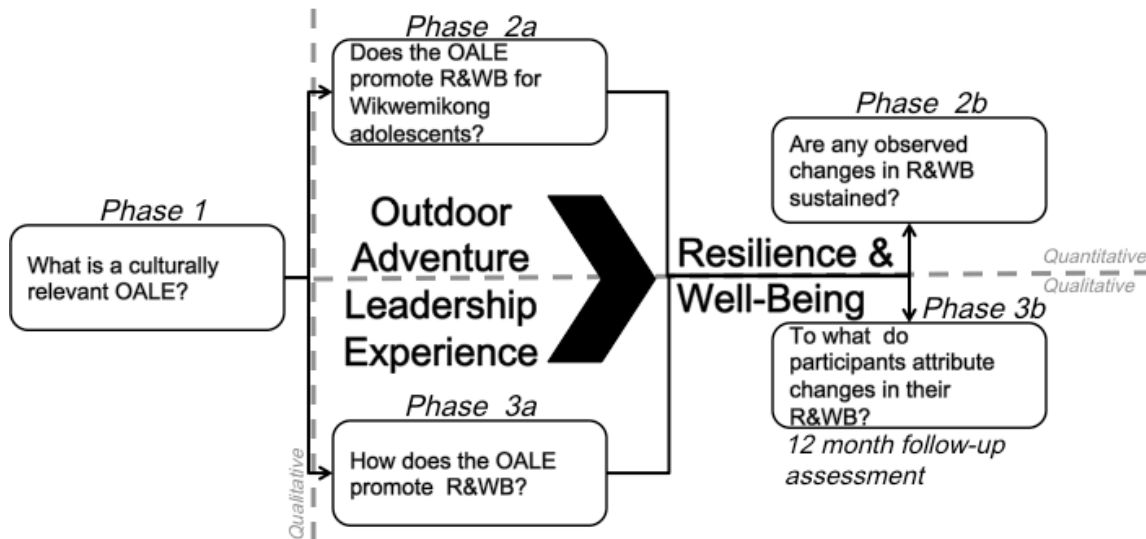


Figure 1-5: Concurrent transformative mixed method research design

Ethical Considerations

The nature of conducting collaborative research with Indigenous communities requires particular ethical considerations that are also reflected in the nature of CBPR. In particular, this study respected the OCAP (ownership, control, access, and possession) principles for research with First Nations communities [162] and the federal guidelines for research involving First Nations, Inuit, and Métis People in Canada. [163]

This research received ethics approval from the Manitoulin Anishinabek Research Review Committee on April 3, 2009 and from the Laurentian University Research Ethics Board on April 20, 2009. Appendix B contains the ethics approval certificates and revisions over the course of the study. Wikwemikong Chief and Council also approved the proposed research at their meeting on April 8, 2009, and a research agreement was developed that outlined roles, responsibilities and expectations. Appendix C contains a copy of the Research Agreement signed by representatives from Laurentian University and the Wikwemikong community.

Operationally, the Wikwemikong Health Services Committee (WHSC) in the community provided initial approval and ongoing oversight for the research. The WHSC reports to Chief and Council and provides leadership and guidance for all health-related services, programs, and research conducted in the community. The WHSC passed a motion to support this research study on December 10, 2008, and there were periodic update presentations provided to the WHSC throughout the research process. Early in the project, a Community Research Steering Committee was established in Wikwemikong to provide guidance for the research in the best interests of the community.

Appendix D contains copies of the verbal Research Information and Consent Form used for the talking circles and focus groups in Phase 1 and the written (signed) Research Information and Consent Form and letter used with the youth in Phase 2 and 3.

Participants & Setting

The target population for the OALE intervention was male and female youth approximately 12-18 years old from Wikwemikong Unceded Indian Reserve in Northeastern Ontario. This age bracket was identified by Wikwemikong community leaders and confirmed in the literature and from earlier research, as a group at risk from a mental health perspective. All youth ages 12-18 years from Wikwemikong were eligible, and their inclusion in the study was encouraged through a community-led promotional campaign utilizing a combination of advertising, referral, recruitment, and self-selection. Thus, the final group of youth participating in the OALE and research comprised a convenience sample. Further details concerning the participants and other inclusion/exclusion criteria are detailed in subsequent chapters.

The setting for the OALE was in the traditional territory of the Wikwemikong community, and this territory is well represented on the map in Figure 1-1. The exact travel route for the OALE passed through both French River and Killarney Provincial Parks as well as through Wikwemikong treaty reserve territory (both on the mainland and Manitoulin Island) and Crown land. A more precise description and map of the OALE route appears in Chapter 5.

1.4 Article and Chapter Overview

This thesis has been developed using the integrated-article design format. There are six articles, or papers, included in this thesis. Four papers are included as discrete chapters (2-5), and two papers appear in appendices. Table 1-1 provides a summary of how the integrated articles (papers) are incorporated into each chapter and appendix.

Each paper included in this thesis was submitted to a particular journal, and each journal had different requirements related to length, style, formatting, and referencing. These papers were reformatted for inclusion within this thesis manuscript so that the formatting and references would be consistent. As indicated in Table 1-1, the papers were prepared progressively such that they reflected the purpose, research questions, and phases of the methodology.

This thesis represents a compilation of research that spans six years (2008-2013). The comprehensive research design ensured that the integrated articles (chapters) report on the methods (Paper #1 in Chapter 2) and findings from each of the three phases (Papers #2-4 in Chapter 3-5 respectively). Four of these papers (Chapters 2 and 3; and Appendices A and J) have been published, and the permissions to include them in this thesis appear in Appendix L. The other two chapters (4 and 5) have been submitted for publication. Chapter 6 is the last chapter of the thesis, and it provides a summary of the key findings from each phase of the study, and then

integrates those findings with respect to the relevant literature. The final sections of the discussion in Chapter 6 focus on several critical areas including: researcher reflexivity and positionality, knowledge translation and capacity building in Wikwemikong, study limitations, future research directions, and a conclusion summarizing the significance and relevance of the findings.

Table 1-1: Overview of thesis chapters and corresponding integrated articles

	Description of Chapter and Paper (Integrated-Article)
Chapter 1	Introduction to thesis with no paper (integrated-article).
Chapter 2	Paper #1: Overview of methods of all three phases; and includes preliminary descriptive results from Phase 2 and early qualitative results from Phase 3.
Chapter 3	Paper #2: Qualitative methods, results, and discussion from Phase 1.
Chapter 4	Paper #3: Quantitative methods, results, and discussion from Phase 2; and includes some explanatory qualitative results from Phase 3 one year following the OALE.
Chapter 5	Paper #4: Qualitative methods, results, and discussion from Phase 3.
Chapter 6	Discussion and Conclusion of thesis with no paper (integrated-article).
Appendix A	Paper #5: Overview of the two main frameworks used in the study.
Appendix J	Paper #6: Overview of the research project and reflexive expression of how the research process impacted three members of the team.

1.5 Dual Knowledge Sources and Personal Impact Statement

Through the process of completing this research project, I realized tremendous learning and personal growth from two interrelated perspectives or domains: (1) acquiring knowledge and skills for conducting scholarly work, and (2) becoming more aware of Indigenous ways of knowing and interpreting the data that emerged. The duality of these domains is an important characteristic of this thesis because they represent two different and distinct sources of knowledge (western science and Indigenous knowledge systems) that influenced this study. [164]

The intersection of these two domains for acquiring knowledge is reflected throughout the thesis, and discussed in more detail in the Reflexivity and Positionality section of Chapter 6, and in the paper appearing in Appendix J.

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Chapter 2: Paper #1 - The Aboriginal Youth Resilience Study: A Look at Promoting Resilience and Well-Being Through Outdoor Adventure Leadership Experience

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Context for the article:

This chapter is a revised version of the first integrated article, and it primarily reports on the methods and descriptive findings from the study (Phases 1, 2, and 3). Appendices E and G-I contain copies of the data collection instruments used, and Appendix F contains a summary of the OALE program that was developed, implemented, and evaluated. There is also an additional section in this article that reports on preliminary qualitative analysis from 14 key informant interviews with youth participants during the OALE. Thus, this chapter presents a methods overview that also includes a description of preliminary findings from all three phases.

Abstract:

It is imperative that we improve the mental health of Aboriginal youth in Canada. From an Aboriginal worldview, mental health must be approached in concert with the promotion of spiritual, physical, and emotional health. This holistic approach is concordant with the processes implicit in programs using outdoor adventure and experiential education (OAEE). Programs using OAEE have proven effective in improving the mental health of youth at risk in other populations; yet there is little evidence of their effectiveness on the resilience and well-being of Aboriginal youth.

We used a three-phase study design that began with a community-based participatory approach to develop an outdoor adventure leadership experience within one Aboriginal community in Canada (Phase 1). We then applied culturally reflexive strategies in the context of a mixed method research design to evaluate the program's effect on the resilience and well-being of youth using both quantitative methods (Phase 2), and qualitative methods (Phase 3). This paper describes the methods and the sample and offers initial findings from the qualitative analysis. The qualitative results suggest that the outdoor adventure leadership experience had a positive effect on resilience. These initial findings are encouraging, since the program has been fully accepted and endorsed by the community.

Key Words: Aboriginal, adventure, community-based, outdoor, resilience, youth

The promotion of mental health is a well-documented priority for Aboriginal Canadians, [1, 2, Chap. 12] especially among youth. [3] Since Aboriginal people live throughout Canada, and their youth are the most rapidly growing segment of the Canadian population, their well-being should be a critical national concern. In 2008 a group of Aboriginal leaders and university researchers collaborated to refine, implement, and evaluate a novel intervention using principles of outdoor adventure and experiential education (OAEE). The intervention was designed to promote the resilience and well-being of Aboriginal youth from one Canadian reserve. This paper describes the research design phases and presents early results from the study. Additional papers will follow that will provide more detail on a broader array of outcomes.

2.1 Background

The term *Aboriginal*, in the Canadian context, usually refers to Indigenous populations and includes: status and non-status Indians, Métis, and Inuit. [4] The term *First Nations* refers primarily to North American Indian communities or status and non-status Indians living on and off reserves throughout the country. However, the terms Aboriginal and First Nations are sometimes used interchangeably because First Nations are the largest group within the Canadian Aboriginal community. Oppressive colonial policies over the years, such as the residential school system and the centuries-long legacy of imperialism, have left a dramatic negative impact on Aboriginal health and mental health status. [For a review, see reference 5]. The Aboriginal population in Canada has been marginalized and has suffered from poor socio-economic conditions comparable to those in developing nations. [1, 6]

The rapidly growing First Nations (FN) population has poorer health status than the rest of the Canadian population with higher rates of many chronic and infectious diseases, higher hospitalization rates, and lower life expectancy. [1, 2, 7] There are also critical issues related to

mental health and illness among FN people, as seen in higher rates of anxiety and depression, [2] and suicide rates that are twice the Canadian rate. [8] Suicide rates among FN youth (15-24 years of age) are five to seven times higher than national rates for males and females respectively. [9] The aforementioned is not a problem unique to Canada, as these suicide rates are similar to those reported for Indigenous people in other colonial countries such as Australia [10] and also in the United States.

In 2001, a federal task force met to discuss FN youth suicide in Canada. [3] Their report entitled *Acting on What We Know: Preventing Youth Suicide in First Nations*, underscored the need to develop strategies to address youth suicide in a holistic way, emphasizing culture. [3] In particular, two of the main themes were: (a) supporting a community-driven approach; and (b) creating strategies for building youth identity, resilience, and culture. [3] Concurrently, Kirmayer and colleagues concluded that “mental health promotion that emphasizes youth and community empowerment is likely to have broad effects on mental health and well-being of Aboriginal communities.” [11, p. S15] This study takes a look at how these recommendations were incorporated into a strategy to address the compelling need for mental health promotion among children and youth within one Aboriginal community.

An Aboriginal approach to mental health promotion encompasses the concept of well-being, which is holistic (spiritual, mental, physical, and emotional), relational (self, others, and nature), and integrated (individual, community, and culture). [12, 13] Aboriginal well-being and healing philosophies do not separate mental health from other aspects of health and include a more comprehensive and interconnected view of a state of balance and harmony within the individual as well as within the family, the community, and the larger environment. [14, 15] Resilience is an important mental health construct for this study since it was identified as a priority for

Aboriginal youth suicide prevention, [3] and it is considered a protective factor for community and youth development. [16] Wright and Masten [17] suggested that “resilience typically refers to a pattern of positive adaptation in the context of past or present adversity,” (p. 18) and Wagnild and Young [18] described the moderating effect of resilience on the negative effects of stress and suggested that it promotes adaptation. Others have defined resilience similarly, suggesting that the concept is characterized by the development or promotion of positive factors in the face of adversity, risk, and negative experiences. [19, 20] Beyond the individual, the concept of resilience can also include family, interpersonal, community and social/cultural characteristics that function as assets or protective factors that are not necessarily linked directly to risk and adversity. [17]

The holistic approach in Aboriginal health and resilience is concordant with the holistic processes that are implicit in outdoor adventure [21-23] and experiential education contexts. [24, 25] Outdoor adventure contexts involving groups of people can be holistic in developing a sense of community through physical, mental, emotional, and often spiritual experiences that occur collaboratively in natural environments. [23, 24] Pryor, Carpenter, and Townsend [26] referred to this holistic process as a spectrum of outdoor experiences and interventions that they described as a socio-ecological approach to promoting health and well-being.

Many OAEE-type programs follow an expeditionary model, where a program is delivered to a small group of participants during a wilderness excursion. The excursion is planned to include multiple natural challenges requiring teamwork and individual effort to overcome. Hence, these challenges could represent a proxy natural intervention for the risk experiences and adversity characteristic of resilience in life. Michael Ungar [27] described this connection further, suggesting that there is a “remarkable similarity between the anticipated outcomes from outdoor

adventure programming and characteristics of resilient individuals” (p. 325). Thus, we hypothesized that an OAEE-type experience may provide an intervention well-suited to Aboriginal youth.

In the past few decades, there has been mounting evidence of therapeutic benefits of OAEE in a variety of populations. [28] In particular, a meta-analysis of 96 studies using adventure education indicated that well-designed OAEE-type programs are effective. [29] Russell [30] demonstrated the efficacy of targeted wilderness therapy programs for youth at risk through improved behavioural functioning, and Clark, Marmol, Cooley, and Gathercoal [31] demonstrated significant behavioural change and also positive characterological changes (personality) for troubled adolescents in wilderness therapy. Additionally, Neill and Dias, [32] Ewert and Yoshino, [33] and Shellman [34] conducted independent studies with experimental designs and concluded that resilience was enhanced via outdoor adventure education.

Despite the accumulating evidence from outcome studies, there is a dearth of evidence on the efficacy of OAEE-type programs with respect to resilience and well-being among Aboriginal youth. Hence, our research team used a collaborative approach to develop, implement, and evaluate an intervention program entitled the Outdoor Adventure Leadership Experience (OALE). The OALE targeted Aboriginal youth who live on reserve; a cohort identified as a high-risk age group within an at-risk population. [3, 8]

2.2 Methods

The methods reflected a collaborative approach between community leaders from Wikwemikong Unceded Indian Reserve (WUIR), and researchers from Laurentian University (LU). Both WUIR and LU are located in Northeastern Ontario, Canada, the study setting. This region of

Northern Ontario is in a boreal forest, and the topography includes many lakes, rivers, rocky outcroppings, and rolling terrain typical of the Canadian Shield. An important component of the collaboration was obtaining ethics approval from the university and Aboriginal community research ethics boards, both of which granted written approval (see Appendix B). In addition, the entire research project was then reviewed and supported within WUIR by the Waasa Naabin Youth Services Centre and the Health Services Committee, and through a Band Council Motion. University and community leaders signed a research agreement to ensure responsibilities and expectations were clear (see Appendix C), and a community research steering committee (CRSC) was established to both review and guide the research process within the community.

There were three phases to the research. Table 2-1 provides an outline of these phases and research questions. In Phase 1 we used principles of community-based participatory action research (CBPAR) to refine the OALE program. In Phase 2 and 3 we used a concurrent transformative mixed method study design [35] to implement and evaluate the program. Preliminary results will be reported in this paper, and several subsequent papers will present additional detail on the findings.

Population and Sample

The target population for the intervention was 12 to 18-year-old adolescents from one FN reserve (WUIR). The age bracket was identified by WUIR community leaders and was a group at risk of poor mental health. Given the heterogeneity of FN populations and language groups across Canada, sampling from within one relatively homogeneous community was deemed important for study validity. WUIR was selected because the research team had an established program of research within the community, [36] and there was some pre-existing infrastructure

to support youth wilderness programming. Moreover, both WUIR and LU were easily accessible (170 km by road).

Table 2-1: Study design phases and research questions

	Phase 1	Phase 2	Phase 3
Approach	Qualitative	Quantitative	Qualitative
Design	CBPAR	Concurrent Transformative Mixed Method	
Research Question	What is a culturally relevant OALE?	Does the OALE intervention promote resilience and well-being for WUIR adolescents?	How does the OALE promote resilience and well-being?
Follow-up Question	N/A	Are any observed changes in resilience and well-being sustained over 12 months?	To what extent do participants attribute changes in their resilience and well-being scores to the OALE or other intervening factors?

Note. CBPAR = Community-Based Participatory Action Research; OALE = Outdoor Adventure leadership Experience; WUIR = Wikwemikong Unceded Indian Reserve.

WUIR is a progressive First Nations community with established infrastructure and self-governance in the areas of health, education, policing, and land management. There was a population of 7,272 status Indian members registered in 2009 with a total of 891 youth ages 12-18. [37] However, only 442 youth (status Indians) lived on the reserve at one time, [37] and

approximately 1-2% of WUIR is comprised of non-status Indians. [38] Hence, the available population was estimated at approximately 450 status and non-status youth ages 12-18 years.

The sample was recruited through a community-led promotional campaign that utilized advertising, referral, recruitment, and self-selection. Adolescents were primarily recruited through the Waasa Naabin Youth Services Centre and through several summer youth training and employment initiatives. Thus, the participants were a sample of convenience.

The program was offered free-of-charge to reduce financial barriers to participation. Exclusion criteria included pre-existing physical and mental health conditions. Physical health was screened through a participant enrolment form and the Physical Activity and Readiness Questionnaire (PAR-Q) [39]. Mental health was assessed via the Health and Well-Being Questionnaire (see Chapter 4 for a description) administered the day before each intervention began. In any cases where these screenings indicated reason for concern, local health care providers were requested to do a more detailed assessment to determine whether it was safe for that participant to proceed with the OALE program, or to intervene clinically to protect the health of the participant.

Phase 1 Methods: Refining the OALE Using CBPAR

The purpose of this phase was to refine a culturally relevant OALE program (intervention) with WUIR through a series of community planning meetings and focus groups. A community-based participatory action research (CBPAR) design was used as this approach was well established in the literature. [40-42] The principles of CBPAR are rooted in a family of collaborative community-based participatory research (CBPR) approaches gaining currency in health-related research. [for an overview see 43, 44] Over the course of 10 months starting in the fall of 2008,

the OALE program was developed from our earlier work, [36] and then refined as a prototype intervention program for youth in the community [see 45].

The collaborative process involved a series of 17 community meetings, presentations, and training sessions; 3 CRSC meetings; and 2 targeted focus groups with Elders, seniors and mental health workers. [45] Prior to implementation, WUIR leaders and assistant leaders were trained to facilitate the OALE program (intervention).

Beyond Phase 1, the following two phases of the research design were considered transformative since the methodology was rooted in a participatory/advocacy worldview, [35] a lens that also reflects the principles of CBPAR and CBPR.

Phase 2 Methods: Outcome Evaluation of OALE Intervention

The purpose of the second phase was to determine empirically whether Aboriginal youths' resilience and well-being improved as a result of the OALE intervention. This was assessed using a Health and Well-Being Questionnaire (HWBQ) that was a combination of nine previously developed scales and had 78 individual items. The nine scales were selected based on their relevance to resilience and well-being, their face validity in an Aboriginal context based on the assessment of the CRSC, and the scales' measurement properties. The combined form of the HWBQ was pilot tested before implementation.

We administered the HWBQ to the participants over two summer seasons during the pre-trip preparation day immediately before each OALE program (intervention), and then approximately one month after the intervention. This paper provides a description of the characteristics of the sample and information on self-rated general health and mental health. Further details on the

HWBQ questionnaire and results from the resilience and well-being scales are reported in separate publications.

Phase 3 Methods: Process Evaluation of OALE Intervention

The purpose of this phase was to determine the mechanism through which the OALE relates to and impacts resilience and well-being. Phase 3 was implemented concurrently with Phase 2 (first season only), and adhered to principles of ethnography [46-48] and critical ethnography. [49, 50] We recorded observations using multiple techniques: participant interviews, focus groups, talking circles, journaling, video, and photography. Preliminary results from the participant interviews are presented here. More detail will follow in a separate publication.

A total of 14 youth were selected to be interviewed using a stratified purposeful sampling strategy. [47] All interviews occurred in the field during the latter half of each OALE intervention in the first season. These interviews were conducted by the principal investigator (who was not Aboriginal) and were recorded with a digital audio recorder. Interview probes were designed sequentially to focus initially on eliciting reflections on both positive and negative aspects of the OALE experience and then led to more specific probes pertaining to health and aspects of the experience that may have related to changes in resilience and well-being for the youth. Prior to analysis, all audio recordings were transcribed verbatim. Preliminary analysis of the data followed principles of analytic induction [51] categorizing meaning units [52] according to the five characteristics of resilience originally espoused by Wagnild and Young. [18, 53] A more detailed inductive analysis of the interviews and all aspects of Phase 3 will be presented in a subsequent publication.

2.3 Results

Phase 1 Results: Description of OALE Program (Intervention)

The collaborative program development resulted in an evidence-based curriculum for a short-term 10-day OALE intervention. There were three specific goals that guided all aspects of the program for leaders and participants to: (1) prepare youth as leaders; (2) promote culture and community; (3) protect youth through resilience and well-being. The OALE program was implemented experientially in the traditional territory of WUIR during a 100+ km canoe excursion homeward toward the Wikwemikong community. The excursion included many natural challenges such as portages, rapids, and waves that were managed in a progressive manner as participant skill acquisition and comfort level improved. Daily themes reflected leadership training modules, and experiential activities reinforced the themes and program goals. Culture was promoted through traditional practices such as prayer, offering of tobacco, talking circles, and a smudging ceremony. An Elder *shared a teaching* at a pre-arranged meeting place of community significance in order to further promote culture and enhance a sense of identity for the youth. Daily debriefs (or talking circles) were held each evening, and a half-day solo experience provided personal reflection time.

Leaders were trained to intentionally facilitate the experience such that daily programming decisions would reflect and reinforce the three program goals. Each excursion was planned so that the trip ended in the Wikwemikong community (the journey home). The arrival included a community welcome feast and a graduation ceremony to celebrate success and recognize individual and group (community) accomplishments. A summary of the OALE program appears in Appendix F. Table 2-2 depicts a breakdown of excursion and intervention groups over two years. All excursions and groups followed the same travel route. All Phase 2 results were

compiled from the entire sample over two years (n=73), however Phase 3 results were based on data collected from multiple sources during the first three excursions in the first year (n=43).

Table 2-2: Number of participants by sex for each excursion group

Excursion	Travel Group	Male Youth	Female Youth	Total Youth	Adult Leaders
1	A	6	4	10	5
	B	7	1	8	6
2	A	3	4	7	3
	B	3	4	7	3
3	A	3	3	6	4
	B	5	0	5	3
4	A	3	5	8	5
	B	5	2	7	4
5	A	4	1	5	4
	B	5	1	6	5
6	A	4	0	4	5
	Total	48	25	73 ^a	47 ^b

Note. There were six separate excursions over two years with two groups travelling concurrently during each excursion, with the exception of Excursion 6 with only one travel group (A).

^an=73 Total youth only includes unique individuals and does not include several participants that repeated more than one excursion.

^bn = 47 Adult leaders includes multiple counts since some participated in more than one excursion. There were 26 different adult leaders involved throughout the study.

Phase 2 Results: Outcome Evaluation – Beginning with Characteristics of the Sample

The final sample included 73 participants or 16% of the on- reserve population 12 -18 years old. Beyond the 73 participants, there were 8 youth who completed the program more than once. Only one youth was excluded from participating for physical health reasons identified through a review of the PAR-Q form completed prior to the trip.

There were 25 females (34%) in total. Nine (9) of the 11 excursion groups included male and female participants, and two groups contained all male participants. Table 2-2 portrays the number of participants by sex in each excursion group. Although 73 youth participated in the OALE intervention and agreed to participate in the study, only 71 completed the program since 2 youth were evacuated for minor physical health concerns. The mean age on the day of departure was 14.6 years, and there was no difference in mean age by sex. One youth was under the minimum age of 12 on the day of departure.

The OALE excursion groups were supported by a team that included a program coordinator, certified outdoor leaders (guides), assistant leaders employed on a temporary basis (2 to 12 months), and permanent youth workers. All these staff team members were from WUIR. The non-Aboriginal principal investigator participated in three excursions, and the principal community collaborator participated in the first excursion. There were 26 different adult leaders who participated in at least one of the excursions, and each travel group included at least 3 adult leaders (see Table 2-2). Thus the participant to leader ratio was less than 2:1.

The characteristics of the participants in the sample were collected as part of the HWBQ, and results were compared to norms where available. The HWBQ was completed by 64 youth prior to departure. There were 58 youth who self-identified as Aboriginal and North American Indian,

one who was Métis, 2 who did not know, and 3 who did not respond. Only one youth self-identified as a member from a reserve population outside WUIR. In our sample, 41% were from lone-parent families, which is more than twice the Canadian rate, and substantially higher than the mean rate for FN communities. Based on the 2006 Census, [54] 17% of Canadian children 14 years and under live in lone-parent families, compared to 33% in FN on-reserve populations across the country. In response to the question “Compared to your classmates, how well do you do at school?” 31% of the youth responded *above* or *much above average*, 63% responded *average*, and 6% responded *below average*. In a large scale study of 2,250 American Indian youth (mean age = 16 years) from 10 different tribal high schools (reserves) in western United States, Mitchell and O’Neill [55] used the same education question and published a mean score of 3.25 ($SD = 0.74$), which is very similar to the mean score of 3.36 ($SD = 0.76$) in our sample ($n = 64$).

Slightly more than half the youth from our sample rated their general health (56.3%) and mental health (58.7%) as very good or *excellent*. Table 2-3 compares these self-rated perceptions of health from our sample of WUIR youth to the Canadian population and to the North East Local Health Integration Network of Ontario, a large health service region in Ontario that includes the WUIR population [56]. These results indicate that youth from our sample had a substantially lower perception of their general health and mental health compared to a similar population in Canada and compared to other youth from the local geographic region surrounding the First Nation.

Table 2-3: Self-reported health and mental health compared to Canadian and regional populations

	WUIR Sample (Ages 12-18 yrs)	Canadian Population (Ages 12-19 yrs)^a	Ontario NE LHIN Population (Ages 12-19 yrs)^a
General Health Rating			
Very Good or Excellent	56.3%	68.7%	64.9%
Good	35.9%	26.4%	28.3%
Fair to Poor	6.3%	4.9%	6.8%
Mental Health Rating			
Very Good or Excellent	58.7%	78.7%	70.8%
Good	31.8%	18.0%	F ^b
Fair to Poor	7.9%	3.3%	F ^b

Note. WUIR = Wikwemikong Unceded Indian Reserve; NE LHIN = Northeast Local Health Integration Network.

Phase 3 Results: Process Evaluation – Did it Work and Why?

Our preliminary qualitative analysis of 14 field interviews indicated that 13 of the 14 youth respondents reported improvements in their resilience and well-being. The age range of respondents was 12–16 years, and 11 were male (78%). The interviews ranged in length from 10-27 minutes. Many of these youth attributed participation in the program as contributing to specific areas of personal growth (such as confidence, leadership, and community-mindedness). Further analysis yielded 216 meaning units (MUs) categorized into the five characteristics of

resilience originally identified by Wagnild and Young [53]: (1) self-reliance generated 35 MUs; (2) meaning generated 103 MUs; (3) equanimity generated 30 MUs; (4) perseverance generated 42 MUs; and (5) existential aloneness generated 4 MUs. According to Wagnild and Young, [18, 53] self-reliance is a belief in oneself such that personal strengths, capabilities and successes can be leveraged for future successes. One youth reflected on his experience:

I was thinking that it [the OALE program] changes our point of view and how things go. You cannot rely on others. You have to help yourself and then you can help others. (Male OALE participant, Day 5)

Meaning is another characteristic of resilience, and can be defined as having a sense of purpose in life, and that this purpose can be a reason for living. One youth commented:

Basically I found the importance of life. I am proud of who I am and where I come from. I love it out here, although it's tough. Tomorrow I am going home but I have got a lot of friends and family that need to hear about the trip. I also want to get on the internet and look up Wikwemikong and learn everything about it. (Female OALE participant, Day 8)

Equanimity is a concept that is more difficult to grasp. Wagnild and Young [18] described it as a balanced view of life that allows one to accept the good with the bad, or accept both positive and negative outcomes. It is characteristic of an ability to moderate the extremes of adversity, and it is often accompanied with a keen sense of humor. A youth described a developing sense of equanimity:

...that's when the bugs were bothering me and I was thinking holy [####], I just feel like sitting down relaxing, and it's kind of hard to sleep because I'm used to sleep[ing] with a fan, and I think it was two days ago from now, that's when I started to sleep good and then last night was good. I was actually having a good nap. So, I'm just starting to enjoy it. (Male OALE participant, Day 5)

Perseverance is akin to persistence and determination and refers to the act of continuing despite difficulties, challenges, obstacles, and setbacks. Many of the youth described a developing sense of perseverance in comments such as: “I feel really determined to finish this trip.” (Female OALE participant, Day 6)

Existential aloneness is the process of realizing that one’s identity is unique and that although people and experiences are shared, people are also independent beings and alone. [18]

Existential aloneness was not well supported in the analysis since only four MUs were identified.

During a debrief session after the last OALE intervention in 2009, 13 leaders and 2 youth participants (15 total) unanimously agreed that the OALE program was effective at promoting resilience and well-being for the participants. Some of the adult leaders suggested that the program also had a positive impact on their own resilience and well-being, and that this impact should be considered in future modifications of the program.

2.4 Discussion

The study was both challenging and rewarding, as it merged the resources of an Aboriginal community and academia using a CBPR-type approach. The nature of the approach included community-university collaboration from the early stages of project inception, through research design, program development, data collection, analysis, evaluation, and dissemination stages. The dissemination stage in particular included both co-presenting and co-authoring. Matier et al. [42] described similar stages of collaboration in their study, characterizing CBPAR as an *ethic of reciprocity* that reflects an “ongoing process of exchange with the aim of establishing and maintaining equality between parties” (p. 321). In the spirit of reciprocity, this study evolved

from our earlier research [36, 57] addressing youth participation and leadership in sport to a focus on mental health promotion.

The anticipated vulnerability of the Aboriginal adolescent population in WUIR was confirmed from our data by the high rate of lone-parent families and low self-rated health scores at baseline. The OALE program was designed to address this vulnerability as a short-term intervention focused on promoting resilience and well-being. Preliminary findings provide early insight into OALE program efficacy in terms of resilience.

The interview data confirmed four of the five resilience characteristics, [18, 53] but did not provide adequate support for existential aloneness. This may not be that surprising, given certain qualities of the experience and population. OALE-type interventions have been described as the development of a social microcosm [58] where a group must work together to accomplish necessary tasks each day; this group work may limit the sense of being alone. Additionally, Aboriginal communities have been described as collectivist societies in contrast to the individualistic society characterized by much of mainstream Canada. [2, Chap. 12] Hence, a framework of resilience that includes the characteristic of existential aloneness may not reflect some of the unique characteristics of the OALE intervention and the realities of a collectivist culture.

The initial analysis of interview data leads to cautious optimism with respect to the efficacy of the OALE program. However, the characteristics of resilience used for analysis only reflect a positive personality construct and a framework of resilience developed originally from qualitative studies with resilient older women. [53] Other frameworks reflect broader more comprehensive perspectives of adolescent resilience that extend beyond the individual.

Adolescent resilience is a complex phenomenon that has been described as both a process and outcome, [59] and as including a multitude of individual, family, community, and socio-economic factors that intersect in the face of risk or adversity. [17, 19, 59]

Fergus and Zimmerman [20] presented a framework for understanding adolescent resilience and recommended that interventions should focus on life skills and developing resources rather than focusing on risk amelioration. Further, they summarized several models of resilience including the *challenge model* which may further help explain the positive outcomes associated with the OALE. [20] The challenge model reflects a belief that small to moderate levels of risk can help adolescents learn how to overcome the risk as long as the exposure is not so high that overcoming it is perceived as impossible. According to Fergus and Zimmerman, [20] the key point is that the level of risk is at an optimum level (not too low or high) so that the youth can practice skills and access resources. Risks that are too high can be debilitating and lead to feelings of hopelessness and distress. Although Fergus and Zimmerman were not describing the challenge model from an outdoor adventure perspective, the concepts appear to be transferable. The perceived risks and natural challenges inherent in the OALE program may have stimulated or promoted a resilience response in the youth participants.

There are several limitations to this study. First, the preliminary qualitative analysis in Phase 3 used an existing non-Aboriginal resilience framework that focused on a positive personality construct that did not address more comprehensive frameworks beyond the individual.

Nevertheless, Wagnild and Young's framework was used as the paradigm for analytic deduction in this study since it was also used to develop the Resilience Scale (RS), one of the most prevalent outcome measures of resilience in use in the literature. [60] It has been used for a variety of populations and age groups including youth [60]; it is recommended for use with

adolescent populations [61]; and it was also used in three outdoor adventure studies. [32-34] Furthermore, the RS is part of the HWBQ administered in Phase 2 of our study. Second, since our study involved only one community, findings cannot be generalized to other Aboriginal communities. However, targeting one community was purposeful. Tailored interventions focused on one homogenous population were recommended, based on recent results from studying resilience across international cultures [62] and then within a group of Canadian adolescents including Aboriginal youth. [63] Third, the qualitative data collection and analysis was completed by an investigative team that included non-Aboriginal researchers interacting with Aboriginal collaborators and study participants. This may have led to a cultural bias (due to differences of perspective) during analysis, although ethnologists have argued that differences of perspective can also be viewed as a methodological strength. [46, 64] Nevertheless, to mitigate the risk of cultural bias, the qualitative approach used methodologies such as CBPAR, researcher reflexivity, guidance from the CRSC, and ongoing collaboration with community leaders.

2.5 Conclusion

Currently nearly 50% of the Aboriginal population in Canada is under 25 years old. [54] Aboriginal children and youth are one of the fastest growing sectors of Canadian society, and because it is recognized that *children and youth are our future*, the indicators of mental health challenges in this population are cause for concern. [2, FNIAH, 3, 6] Preliminary findings from the OALE resilience study confirmed some of these concerns. The number of youth from lone-parent families in our WUIR sample (n=73) was nearly three times higher than the Canadian population. Compared to the Canadian population in a similar age bracket (12-19 yrs), 12.5% fewer youth from our WUIR sample (12-18 yrs) reported their general health as very good or excellent and 20% fewer youth reported their mental health as very good to excellent. From a

determinants of health perspective, these results are not surprising since the First Nations population in Canada has lower levels education, employment, and income compared to the Canadian population. [8]

To address the mental health needs in WUIR, the OALE was developed collaboratively between community leaders and researchers from Laurentian University. Preliminary findings from 14 participant interviews confirmed four of the five characteristics of resilience originally identified by Wagnild and Young. [18, 53] These preliminary results suggest that the OALE program provided most of the components necessary to promote resilience. Over two years, nearly one in six youth (12 - 18 years of age) on reserve in WUIR participated in the OALE.

Together, these early findings indicate that the program uptake is excellent and provide encouraging data to support a potentially effective intervention to address the mental health challenge for adolescents in WUIR. The OALE training manual [65] describes the program in more detail, and subsequent publications will present results from Phase 1, 2 and 3 in more depth.

Future research should explore whether the OALE program and outcomes would be generalizable to other Aboriginal populations. There is also a need to better understand process and outcome differences in outdoor adventure programs developed in other Aboriginal communities in Canada and in different Indigenous populations from other countries.

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Chapter 3: Paper #2 - Developing a Culturally Relevant Outdoor Leadership Training Program for Aboriginal Youth (Phase 1)

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Ritchie SD, Wabano MJ, Young N, Schinke R, Peltier D, Battocchio R, Russell K. Developing a culturally relevant outdoor leadership training program for Aboriginal youth. *Journal of Experiential Education* 2010; **32(3)**: 300-4.

Context for the article:

This chapter is a revised version of the second integrated article that reports on the qualitative methods and findings related to Phase 1 of the study. In Phase 1, the OALE was developed and refined collaboratively within the Wikwemikong community through a series of community planning meetings and targeted focus groups with community Elders and mental health workers. See Appendix E for an outline of interview questions. The findings from this phase helped address the first research question: What is a culturally relevant OALE? This article only presents summary data related to the two focus groups that were designed to address this question (due to word count limits in the journal). Thus, this chapter is limited in scope, and other relevant details about the development of the OALE appear in other chapters and are then summarized and integrated in Chapter 6.

3.1 Introduction and Literature Review

Aboriginal People in Canada have suffered discrimination and oppressive federal policies over the past 200 years. Beyond these challenges, they have survived through centuries of imperialism, colonization, and assimilation. [1] This long history of adverse events, coupled with a rapidly growing population, vast geographic dispersion, and poor socio-economic conditions, place Aboriginal youth at risk of developing mental health problems. [2, 3] For example, First Nations youth suicide rates in Canada are five to seven times the national average. [2] Recommendations for suicide prevention include mental health promotion strategies, developed through a community-driven approach, to build Aboriginal youth resilience and cultural identity [4]. Since Aboriginal people are intimately connected with their outdoor environments [5] and since outdoor adventure has proven effective in addressing the needs of youth at risk, [6] outdoor adventure appears to be an intervention ideally suited for addressing mental health through youth leadership preparation in Aboriginal communities.

A collaborative research team, including university and community investigators, addressed this need through the development of a culturally relevant outdoor leadership program within one Aboriginal community in Northeastern Ontario. The investigators used a community-based participatory action research (CBPAR) methodology and targeted focus groups to develop a 10-day outdoor leadership training program that was implemented in the summer of 2009. *[Note: The term outdoor leadership training program (OLTP) was used in the published version of this paper, however it refers to the same program described elsewhere in this thesis as the outdoor adventure leadership experience (OALE). In the early years of program development, there was no clearly identified name for the program, so various terms were used over the years. The term*

OALE is now well established in Wikwemikong as the name for the program, and it is the only term used throughout the rest of this thesis.]

3.2 Methods

Creswell [7] adequately described the philosophical assumptions of a participatory worldview, and numerous examples can be found in the literature [8, 9] and also in guidelines [10] for CBPAR projects with Aboriginal communities. The present CBPAR methodology was rooted in a collaborative approach between Laurentian University researchers and the Wikwemikong community co-researchers, involving three inter-related components: community meetings, a community research steering committee, and targeted focus groups. Community meetings included both formal and informal meetings, workshops, and presentations by university and community collaborators. The community research steering committee included an Elder, mental health workers, youth workers, band councilors, and youth representatives; it served as an independent research resource and support mechanism that also preserved the community's best interests.

We recruited a purposive sample of Elders and mental health workers from the community and invited them to participate in targeted focus groups. Elders were selected as they are the guardians of community history and cultural wisdom. Mental health workers provided relevant expertise on possible programming improvements that would further promote mental health and well-being for youth participants in the program. In a collaborative fashion, the focus groups were co-facilitated by a Wikwemikong community investigator and the Laurentian University principal investigator. The focus groups were transcribed verbatim and analyzed using a process of *indigenous coding* [9] to compile and arrange thematic responses such that the words were

reflective of the language and intended meaning within the culture and context. The analysis followed Cho and Trent's [11] guidelines for transactional and transformational validity.

3.3 Results

Seventeen Elders and four mental health workers participated in two separate focus groups, and four themes emerged from the data: (1) *influencing self and others*; (2) *connecting with Aboriginal roots and culture*; (3) *respect and values*; and (4) *persistence challenges and strategies*.

Influencing Self and Others

Focus group participants emphasized the necessity for youth to become self-reliant and independent, be disciplined, and assume responsibilities. Concurrently, participants indicated that youth must interact and connect with others, develop effective relationships, and learn to solve problems and resolve conflicts. Support structures for the youth need to balance love, affirmation, and involvement with clear boundaries and consequences for actions.

Connecting with Aboriginal Roots and Culture

Both Elders and mental health workers reported that youth develop a sense of Aboriginal identity through stories, legends, and lessons from the past as well as growth opportunities through spiritual ceremonies and traditions (such as prayer and offering tobacco), learning the Ojibway language, and receiving teachings from Elders.

Respect and Values

Values such as patience, appreciation, forgiveness, and the Seven Grandfather Teachings (wisdom, love, respect, bravery, honesty, humility, and truth) were identified by both the Elders and mental health workers as important for youth development. The Seven Grandfather

Teachings are traditional teachings that are also considered gifts from the Creator for living a balanced life. Perhaps the most salient theme from the Elder focus group was a perceived loss of respect by youth for themselves, others, and their community.

Persistence Challenges and Strategies

Participants identified many significant challenges faced by youth in the community such as physical and emotional abuse, substance abuse, negative parenting, and peer pressure. However, persistence strategies such as making a commitment to change, building positive functional relationships, and cultivating a positive outlook combine to support youth as they persevere through these same challenges.

3.4 Discussion

Focus group participants provided insights that contributed significantly to the OALE development in unique ways. In terms of influencing self and others, staff were trained to intentionally role-model desired functional behaviours within a social milieu involving natural consequences resulting from interactions in an outdoor expedition context. Connecting to Aboriginal roots and culture resulted in the involvement of Elders, application of cultural learning themes, use of Ojibway (native language) terms, and provision of reflection opportunities through a solo experience and evening sharing circles. To ensure that values were emphasized, the OALE was adapted to incorporate the Seven Grandfather Teachings daily as themes and also incorporate them through a process of *mentoring intentionality* – a deliberate attempt by staff to role model and reinforce the teachings. The progressive challenges, teamwork, and triumphs associated with the outdoor expeditionary model of the OALE were deemed to inherently foster the requisite persistence strategies.

A limitation of the approach used is that the program was unique and proprietary to the intended community and not necessarily generalizable to other Aboriginal communities. The interrelated and iterative process of program development and refinement occurred over the course of two years and characterized effective CBPAR. The program culminated in a collaborative development process through community meetings, research steering committee support and guidance, and results from the targeted focus groups. This reflected community expertise, the wisdom of Elders, and support from academia. The OALE was implemented during the summer of 2009, commencing with two weeks of staff training. Forty-four (44) youth from the community participated in six separate 10-day OALE's that were delivered experientially during a canoe excursion homeward in the traditional territory of the Wikwemikong community. *[Note: One (1) of the youth did not complete the experience, so there were 43 youth with data that was available for analysis.]*

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Chapter 4: Paper #3 - Promoting Resilience and Well-Being through an Outdoor Intervention Designed for Aboriginal Adolescents (Phase 2)

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Context for the article:

This chapter is a revised version of the third integrated article that reports primarily on the quantitative methods and findings related to Phase 2 of the study. The findings from this phase addressed the second research question: Does the OALE intervention promote resilience and well-being for Wikwemikong youth? This article also addresses the sustainability of results over 12 months, and it reports on a sub-section of the qualitative data related to what extent participants attributed any changes in their health and well-being to the OALE or other intervening factors. Appendix G contains a copy of the Health and Well-Being Questionnaire (HWBQ) used to collect the data, and Appendix H summarizes the source of the scales and question items used in the HWBQ.

Abstract:

Introduction. Indigenous people in Canada (First Nations, Inuit and Métis) have a lower health status compared to the Canadian population. There is a particular concern about the mental health and well-being of First Nations adolescents living on reserves. Interventions following principles of outdoor education and adventure therapy appear to be an appropriate fit for this population. These approaches have proven effective in non-Indigenous populations, yet there is very little evidence on the efficacy of these types of programs for Indigenous adolescents. The primary purpose of this study was to evaluate the impact of an outdoor adventure leadership experience (OALE) on the resilience and well-being of First Nations adolescents from one reserve community. The secondary purposes were to explore whether this impact was sustainable and whether there were any intervening factors that may have influenced the impact.

Methods. The collaborative research team used a mixed method design to evaluate the 10-day OALE for adolescents from Wikwemikong Unceded Indian Reserve in Northeastern Ontario, Canada. The main outcome assessed was resilience, measured by self-report, using the 14-Item Resilience Scale (RS-14). Several other exploratory measures assessed other aspects of health and well-being. The questionnaire package was administered at three different time periods: time one (T1) one day before the OALE; time two (T2) one month after the OALE; and time three (T3) one year after the OALE. The Mental Component Score (MCS) of the SF-12v2 was used to confirm any changes in resilience. Open-ended questions were appended to the questionnaire at the one-year point to identify any intervening factors that may have impacted any changes in resilience and well-being. The primary analysis compared mean RS-14 scores at T1 vs. T2. Responses to the open-ended questions were analyzed using content analysis.

Results. Over two summers (2009 and 2010), 73 youth 12-18 years of age from Wikwemikong participated in a standardized 10-day OALE program. This represented 15% of the on-reserve population of adolescents in this age range. Survey responses from 59 (80.8%) participants were available for analysis at T1, compared to 47 (64.4%) at T2 and 33 (45.2%) at T3. The mean RS-14 score was 73.65 at baseline, and this improved 3.40 points ($p=.011$) between T1 and T2. However, the resilience scores at T3 (one year post-OALE) had a mean of 74.19, indicating a return back to pre-OALE levels. The mean MCS score at T1 was 48.23 and it improved over the subsequent two time periods. There were several intervening factors reported at T3 that may have influenced the decrease in resilience scores from T2 to T3. These included changes in family living situation, death in the family, and other life stressors that occurred over the course of the year.

Conclusion. Outcome scores from this study provide a unique glimpse into the self-reported health and well-being for adolescents within one First Nations community in Canada. The OALE program was beneficial in promoting resilience for adolescents in Wikwemikong over the short-term. Future studies are necessary to assess whether the OALE (or similar outdoor type interventions) are effective within other communities.

Keywords:

Resilience; Adventure Therapy; Aboriginal; Mental Health; North American Indians

4.1 Introduction

The mental health of Aboriginal adolescents is a well-documented priority in Canada. [1-3] Overall, Aboriginal children and adolescents in Canada endure difficult living conditions and experience poorer health outcomes compared to the Canadian population. [4-7] There are many factors identified that contribute to this situation including a history of colonialism that led to disadvantage via the social determinants of health. [8, 9] The Aboriginal population in Canada is comprised of First Nations, Inuit, and Métis who represent 4.3% [10] of the Canadian population, and 10% of the population in Northeastern Ontario. [11] The Aboriginal population in Canada is growing four times faster than the non-Aboriginal population resulting in communities with increasing numbers of children and youth. [10]

The term Aboriginal is used in this paper to reflect a broader perspective, although this study refers primarily to one First Nations *reserve* community in Canada. Only First Nations people in Canada live on reserves. Many children from Aboriginal communities reach their teen years with uncertainty about their cultural identity, few proximal opportunities for advancement, and a sense of hopelessness about their future. [6, 12] Youth suicide rates [13, 14] and incident rates of mental illness [2, 6] are higher in Aboriginal populations in Canada, compared to non-Aboriginal populations. These factors have led to a concern about the mental health of Aboriginal adolescents in Canada. Developing resilience and a sense of identity is particularly important, since it has been identified as a strategic objective for mental health promotion initiatives for Aboriginal and First Nations youth. [3, 12, 14-16] There is also a need to promote mental health and resilience within many other Aboriginal or Indigenous populations in other nations. [17-19]

Aboriginal health and promotion initiatives in Canada are often grounded in a holistic circular view of health and life, [7] and the Medicine Wheel is one framework that is used by many Aboriginal communities across the country. [20] However, it is not the only framework used, since each community has a unique cultural heritage. Nevertheless, the Medicine Wheel has been used to guide the development of a wide variety of programs and initiatives since it reflects an interconnected worldview. The Medicine Wheel usually includes the four dimensions of health: physical (body), mental (mind), emotional (heart), and spiritual (spirit). [21, 22] It also represents a holistic view of health that is in harmony with the individual, the community, and the natural world. [21, 23, 24] This worldview helps many Aboriginal people to embrace life as an interconnected experience that is difficult to separate into component parts since each aspect of life has some influence on another aspect [8, 21, 23]. For instance, the health of an individual has an impact on the health of a community and the natural world [25], and an individual's mental health also has an impact on their physical, emotional, and spiritual health.[23]

Many Canadian First Nations communities have connected their health with their cultural heritage through the re-introduction of historical ceremonies, traditional practices, and a promotion of the *Good Life* [23, 26] This re-connection process has included many diverse programs and interventions that are developed through government agencies, helping organizations, and by communities themselves. The First Nations and Inuit Health Branch (FNIHB) of Health Canada has developed several mental health-related programs such as the Indian Residential Schools Mental Health Support Program, the National Native Alcohol and Drug Abuse Program, the National Aboriginal Youth Suicide Prevention Strategy, and the Brighter Futures and Building Healthy Communities program. [27]

Most First Nations communities receive funding from Health Canada to develop relevant local initiatives for their on-reserve populations. Often, there is very little evidence reported on the efficacy of these programs. The primary purpose of this study was to evaluate the impact of a culturally relevant Outdoor Adventure Leadership Experience (OALE) on the resilience and well-being of adolescents from Wikwemikong Unceded Indian Reserve in Northeastern Ontario.

Outdoor Adventure as a Therapeutic Intervention

There is a growing body of evidence suggesting that outdoor adventure [28-30] and wilderness therapy [31, 32] programs have potential as a mental health intervention for adolescents. [33-36] Gass, Gillis and Russell[32] summarized the findings from nine literature reviews and six meta-analyses completed in outdoor adventure and wilderness therapy. Their summary highlighted varied program models and outcomes identified in the literature. However, they concluded that these types of programs and interventions resulted in two broad outcome areas based on findings reported in most studies: (a) positive and significant development of self-concept; and (b) the development of adaptive and social skills due to the unique group-based treatment milieu. [32] The theoretical foundation of outdoor adventure and wilderness therapy programs is often traced back to the Outward Bound Process Model. [32, 37] Despite the mounting evidence in non-Aboriginal populations, there is a paucity of evidence related to the effectiveness of outdoor programming in Aboriginal populations. There is also a dearth of published research on how to design, implement, and evaluate these programs. Nevertheless, outdoor and land-based programming is prevalent in many Aboriginal communities, and it holds promise as a culturally relevant health promotion modality for Aboriginal adolescents on reserves. [3, 38] Takano aptly described examples of several land-based programs within a few Aboriginal communities in

Canada. [39] These programs had many unique elements, but a common theme was that they reflected a deep *bonding* or *connecting* process with the land. [39]

Community leaders from Wikwemikong collaborated with university researchers – primarily from Laurentian University in Sudbury, Ontario, Canada – to develop and implement the OALE intervention. The OALE is a 10-day intensive program involving a wilderness canoe expedition homeward through the traditional territory of Wikwemikong. The Medicine Wheel [20-22] and the Outward Bound Process Model [32, 37] were used as developmental frameworks. [40] The Outward Bound Process Model illustrates how a participant achieves positive change and personal growth by progressing through a series of challenges in a supportive small group environment where successive problems are addressed, solved, and then re-organized into learnings that may transfer to life beyond the outdoor experience. [37]

The OALE included many natural challenges such as rapids, portages, navigation, and open-water crossings. Participants were assigned day leadership responsibilities, and the experience included a half-day solo component. Group discussions and talking circles [41, 42] occurred each night around a campfire, and other program components were interwoven into the routine of the travel day. Program staff and guides from Wikwemikong facilitated the experience, mentored the youth participants, and implemented program elements as needed and when appropriate. Hence, although the process and context of the OALE was culturally unique, it was also similar in some ways to other non-Aboriginal wilderness travel programs that adhered to the Outward Bound Process Model. More details of the program have been published elsewhere. [43, 44]

Early in the development of the program, the collaborative research team realized the importance of empirically measuring outcomes of the OALE intervention as an objective evaluation of its effectiveness. The team believed that measuring effectiveness at two different time periods after the intervention would quantify both the magnitude and sustainability of any impact.

Understanding some of the other intervening factors between the time periods would provide important contextual factors that may have influenced outcome scores. This would provide credible data that would help improve the program and help secure continued funding for the program into the future.

Resilience and Well-Being

The OALE was designed to promote resilience and well-being. There are many varied theories and definitions of resilience in the literature, [45, 46] however Wagnild's simple operational definition of resilience was selected, namely "the ability to successfully cope with change or misfortune" [47, p. 15] because it is focused on the individual; it also informed the development of the measure of resilience that was used in this study. Others have offered definitions that are sensitive to culture and context [48, 49] and include, family, environment, and community factors [50-52]. For the purpose of this paper, well-being is defined as the combined inclusive nature of holistic health as it is reflected by the four dimensions of the Medicine Wheel. [20] The Medicine Wheel is also the preferred framework to use for health promotion initiatives in Wikwemikong.

There were one primary and two exploratory research questions addressed in this study: (1) Does the OALE promote resilience and well-being for Wikwemikong adolescents? (2a) Are results sustainable for one year after the OALE? and (2b) What are some intervening factors that may explain changes in results one year after the OALE?

The collaborative research team originally sought measurement scales that were developed specifically for Aboriginal adolescents. While there were a plethora of scales from mainstream North American populations, there were no measures of resilience or mental well-being that were developed for Aboriginal adolescents. The team selected a scale to assess resilience as the primary outcome, and also selected several brief scales that reflected the four dimensions of health (physical, mental, emotional, and spiritual) from the Medicine Wheel framework. These were reviewed and approved by the community to ensure that they were appropriate for use in the community. The review (evaluation process and criteria used) is described in detail in the methods section.

4.2 Methods

The project was conducted by a collaborative research team comprised of health leaders from Wikwemikong Unceded Indian Reserve and academic researchers, primarily from Laurentian University. A mixed method design [43, 53] was used to evaluate the impact of the OALE program on the resilience of adolescents from the Wikwemikong Unceded Indian Reserve in Northeastern Ontario, Canada. In particular, this study used a concurrent embedded strategy whereby the quantitative approach guided the project, and the embedded qualitative approach provided a supplemental explanatory purpose. [53]

Population and Sample

Wikwemikong is a relatively large First Nation encompassing 413 square kilometres in the Georgian Bay area of Lake Huron. [54] The on-reserve population is 2,592 [54] and most people live in several village areas on the main part of the First Nation on the east end of Manitoulin Island. [55] This reserve is located 170 km from the nearest large urban centre (Sudbury) and delivers its own educational and health care programs. The target population of adolescents 12 to

18 years living on reserve in Wikwemikong was estimated at approximately 450. [43] OALE participants were recruited through various promotional campaigns coordinated by the Waasa Naabin Community Youth Services Centre. Adolescents for a comparison group were recruited from a summer youth employment program in the community. There was no cost for the adolescents to participate, and they were pre-screened for physical and mental health issues prior to inclusion in the sample. [43] Over a two-year data collection period, there were 73 adolescents who participated in the OALE, and 8 repeated the experience more than once. The program and study involved six separate excursions, with most excursions including two separate travel groups for a total of 11 distinct travel groups. Other details about the OALE program and sample were described in a previous publication. [43]

Questionnaire Measures

A comprehensive survey package, comprised of various scales that measured resilience and well-being, was compiled into a Health and Well-Being Questionnaire (HWBQ). A local Community Research Steering Committee (CRSC) in Wikwemikong provided oversight and guidance through all phases of the research and the development of the survey package, including the review and selection of all scales and questions included. The CRSC also included two adolescent representatives. There were numerous iterations and changes to the survey package over several months, before the final version of the HWBQ was complete. Early in the process, the CRSC concluded that an examination of resilience and mental health could not be completed without also examining other aspects of well-being based on the interconnected holistic view of health represented by the Medicine Wheel. The HWBQ consisted of seven distinct scales: (1) 14-item Resilience Scale (RS-14) [47]; (2) Mental Component Score (MCS) from the SF-12v2 [56]; (3) Physical Component Score (PCS) from the SF-12v2 [56]; (4) Scale of Positive and

Negative Emotion – Balance (SPANE) [57]; (5) Flourishing Scale (FS) [57]; (6) Self-Esteem Scale (SES) [58-60]; and (7) Satisfaction with Life Scale (SWL) [61]. Several other items (questions) from other sources were also included. The selection criteria, adaptation, and justification for use of these scales and items are provided below.

There were six main criteria used by the CRSC for the selection and inclusion of each scale: (a) evidence of strong psychometric properties (reliability and validity); (b) track record of support and use with Aboriginal youth populations (with normed data if available); (c) sensitivity to short-term changes; (d) positively measured and reinforced health and wellness rather than illness and dysfunction; (e) support and use within outdoor adventure contexts; and (f) appropriate and acceptable to the community. None of the scales in the final version of the HWBQ met all of these criteria, and none had been developed or normed within an Aboriginal adolescent population. Nevertheless, the CRSC evaluated and selected the most appropriate scales that were to be included, and the final version of the HWBQ package of scales was approved for use in the community. The HWBQ was pilot tested with the CRSC, and then reviewed with a small group of non-Aboriginal adolescents in the target age range. Item #4 of the RS-14: “I usually take things in stride” was not understood well by these adolescents, so after discussion with scale developer, Gail Wagnild, it was changed to: “I don’t let things upset me for long.”

After a detailed review of the literature, resilience was identified as the primary construct of interest. Ahern, Kiehl, Sole, and Byers completed a comprehensive review of the literature for measures of resilience appropriate for adolescent populations. [62] From their findings, they concluded that the 25-item Resilience Scale (RS-25) developed by Wagnild and Young [63] was the best instrument to use with adolescent populations. The RS-25 had strong psychometric

properties, and it had been used in a variety of populations including different cultures (Russian, Mexican, Irish, Australian) and contexts including young adults, adolescents, adolescent mothers, and homeless adolescents. The RS-25 was also the most common resilience scale used to assess outdoor adventure programs in non-Aboriginal contexts. [64-69] The original version of the RS contained 25 items and exploratory factor analysis, with data from an outdoor context, supported a scale with 10 less items loading on only one (1) factor. [67] In January 2009, Wagnild released a 14-item version (RS-14) of the RS. From the strong psychometric properties, long history of use, conclusions of Ahern and colleagues, [62] acceptance within Wikwemikong, and application within several outdoor adventure contexts, the RS-14 was deemed the most appropriate primary outcome measure.

A secondary (confirmatory) scale was selected to measure overall mental health to verify the primary analysis. This confirmatory scale was the MCS, which is the mental health sub-scale from the SF-12v2[®]. [56] The SF-12v2[®] is a generic global health measure that is one of a suite of measures (including SF-36v2[®] and SF-8TM) designed to assess physical and mental health. [70] These measures are among the most prevalent tools for assessing self-reported health. [70, 71] They have been used in thousands of studies in many different nations and cultures. [70] The SF-12v2[®] is a shorter version (12 questions) of the SF-36v2[®] that is purported to be very robust and appropriate for use when combined in large questionnaire packages that include other measurement scales. [56]

Beyond the RS-14 and MCS, five additional scales (PCS, SPANE, FS, SES, SWL) were included in the HWBQ as supportive measures to assess the four dimensions of health and well-being. The HWBQ also included selected items (questions) from two additional aspects of well-being, social support (SS) and spiritual values (SV), from the Canadian Community Health

Survey. [60] Four additional questions related to community values (CV) were included from the Child and Youth Resilience Measure. [72] The final version of the HWBQ package was approved for use in the community by the CRSC. It was designed to include short scales and questions that reflected the four dimensions of health and well-being from the Medicine Wheel without imposing undue burden on adolescent respondents. There were a total of 72 items from the scales included in the HWBQ, and there were six additional items measuring demographic variables and self-reported mental health. Table 4-1 summarizes the scales that were included in the questionnaire package, along with the corresponding dimension of health assessed.

Open-ended structured questions were appended to a second version of the HWBQ that was administered one year after the OALE. These questions were designed to identify to what extent participants attributed changes in their resilience and well-being scores to the OALE or other intervening factors in the 12-month period following the end of the OALE intervention.

Data Collection

The HWBQ was administered initially one day before the OALE (T1) and one month after the OALE (T2). The HWBQ was also administered at two similar time periods to a comparison group of adolescents from Wikwemikong who did not participate in the OALE. The HWBQ was administered one year after the OALE (T3) in order to explore the sustainability of changes over time. Collecting data at T3, and including other well-being scales beyond the RS-14 (as recommended by the CRSC), was on a confirmatory and exploratory basis only. The open-ended structured questions were only appended to the HWBQ at T3.

Table 4-1: Scales and dimensions of the Health and Well-Being Questionnaire (HWBQ)

Scales and Constructs	Number of		Health Dimension(s)
	Items (Questions)	Scale Range	
Resilience Scale (RS-14) ^a	14	14 to 98	Mental
Well-Being Scales^a			
Mental Component Score (MCS) ^b	6	<i>see note below</i>	Mental
Physical Component Score (PCS) ^b	6	<i>see note below</i>	Physical
Self Esteem Scale (SES)	6	0 to 24	Mental
Flourishing Scale (FS)	8	8 to 56	Mental/Emotional
Scale of Positive and Negative Emotion - Balance (SPANE)	12	-24 to 24	Emotional
Satisfaction with Life Scale (SWLS)	5	5 to 35	Mental/Emotional
Other Questions and Constructs			
Spiritual Values (SV) ^c	4	4 to 16	Spiritual
Social Support (SS) ^c	7	7 to 35	Emotional/Mental
Community Values (CV) ^d	4	4 to 16	Spiritual/Mental
Total Number of Scale Items	72		

^aThese were complete scales with question items factored into one summary score measuring one construct.

^bThe MCS and PCS scales were derived from the SF-12v2, which was initially analyzed using the QualityMetric Health Outcomes™ Scoring Software 4.0. Scale ranges for MCS and PCS were standardized using norm based scoring referenced to a mean of 50 and a SD of 10 for the 1998 US general population. [55]

^cThese were a sub-set of questions from the Canadian Community Health Survey Cycle 4.1 [59] that measured one construct.

^dThese were a sub-set of questions from the Child and Youth Resilience Measure [71] that measured one construct.

Ethics approval for this study was obtained from the Laurentian University Research Ethics Board (approval number 2009-03-03-R5) and the Manitoulin Anishinabek Research Review Committee. Informed consent and assent was obtained for all participants. The study was approved in the Wikwemikong community by the Health Services Committee and Chief and Council.

Analysis

The primary hypothesis was that resilience would improve from T1 to T2. Thus, *a priori* sample size calculations (paired-sample t-test) using the RS-14 were completed using the G*Power 3.0.1 analytical software. This yielded a minimum sample size requirement of $n=44$ (based on Effect Size=.50, Power=.90, $p=.05$). A sample size of 44 was achievable in Wikwemikong, however it was recognized that this would also restrict the number of analyses that could be performed. Thus, sample size was also a limitation of the study that is discussed later in the paper.

Responses from the HWBQ were entered into Microsoft Excel version 14, and the data entry error rate was assessed. Summary scores were computed in Excel, with the exception of the SF-12v2[®] scales that were computed by the QualityMetric Health Outcomes[™] Scoring Software 4.0. All quantitative analyses were completed using the statistical software IBM[®] SPSS[®] version 19.0. Each scale included in the HWBQ was examined graphically for kurtosis and skewness, and using the Kolmogorov-Smirnov statistic to assess the degree of normality of the distribution.

[73]

Resilience, using the RS-14, was assessed by comparing scores from T2 to baseline (T1). The MCS scores were analyzed to confirm any changes since resilience is a construct of mental health. The RS-14 change scores from the participant group were also interpreted within the

context of the change scores from the comparison group. Analyses of all other scales over the three time periods were exploratory due to the small sample size and large number of dependent variables. Effect sizes (ES) were calculated using Hedges' g [74] and were interpreted based on Cohen's suggested standard benchmarks for interpreting ES's as small (0.2), medium (0.5), and large (0.8). [75]

Qualitative data was analyzed using NVivo 9.0, based on responses to the open-ended questions at T3. Content was analyzed inductively and coded to thematic concepts. [76] The intent of this analysis was to provide context for the interpretation of the primary quantitative analysis in order to determine if there were any intervening factors that helped explain any changes in resilience.

4.3 Results

There were 73 adolescents who participated in the OALE over two summers, and 61 (83.6%) completed the full HWBQ package at T1 and then completed the 10-day OALE experience.

Only one youth was excluded from participation prior to the commencement of the OALE due to a physical health concern, and two other youth were excluded for minor physical health issues that developed during the excursion and prevented them from completing the OALE.

Participants ranged in age from 11.9–18.7 years with a mean age of 14.6, and 64.4% ($n=38$) were male. Less than half (42.4%; $n=25$) of all participants lived in a family situation with both parents. There were no participants who self-identified as non-Aboriginal. Further descriptive details about the sample have been published elsewhere. [43] There were 47 (64.4%) adolescents who completed the HWBQ approximately one month after the OALE (T2), and 33 (45.2%) who completed the HWBQ approximately one year later (T3).

Normality of scale score distributions was confirmed by histograms, boxplots, and use of the Kolmogorov-Smirnov statistic. [73] Two cases were found to contain outliers on multiple scales, and they were removed from all analyses to enhance normality for the RS-14, the MCS, and three other scales (SE, FS, and SWLS). Their removal did not affect directionality or significance of results. Thus 59 participants (80.8%) were included in the primary analysis at T1. The HWBQ was also administered to a comparison group of 31 adolescents from Wikwemikong who did not participate in the OALE. This was originally intended to be a comparison group over a similar time period as the experimental group (T1 to T2), however only nine complete data sets were received (T1 and T2).

The HWBQ included seven scales, and Table 4-2 portrays the mean scores of each of the seven measures at baseline (T1) with the internal consistency of each scale. Table 4-3 depicts scale scores at baseline by sex and age category.

This study was designed a priori to assess changes (T2-T1) in resilience as the primary outcome measure. A paired-samples t-test was conducted to evaluate the impact of the OALE intervention on participants' resilience scores (RS-14) from baseline (T1) which was one day pre-intervention, to T2 which was one month post-intervention. This resulted in 46 matched pairs between T1 and T2. There was a statistically significant increase in resilience scores from T1 (Mean=73.65, SD=9.78) to T2 (Mean=77.05, SD=9.07), $t(45)=-2.64$, $p=.011$ (two-tailed). The mean increase in resilience was 3.39 (95% CI 0.81-5.98). Hedge's g indicated a small to medium effect size ($ES=0.36$).

The change scores (T2-T1) for the OALE participants ($n=46$) were also interpreted in the context of the change scores for a comparison group from Wikwemikong (15-20 years of age) who did

not participate in the OALE, however only nine complete data sets were received (T1 and T2). There was a notable difference in resilience change (Δ) scores for the OALE participants (Mean $\Delta = 3.39$, SD = 8.70) and comparison group (Mean $\Delta = -16.05$, SD=22.65). The magnitude of the difference in scores (Mean $\Delta = 19.44$) was very large (ES=1.63).

Table 4-2: Scale score means and reliability at baseline (T1)

Scale	Sample Size (n)	Mean (SD)	Internal Consistency (α)	Mean Inter-Item Correlation
Resilience Scale (RS-14)	59	73.09 (10.52)	.788	.225
Mental Component Score (MCS from SF-12v2)	58	47.87 (8.19)	<i>see note below^a</i>	
Physical Component Score (PCS from SF-12v2)	57	46.73 (7.74)	<i>see note below^a</i>	
Self Esteem Scale (SES)	58	17.17 (3.17)	.637	.242
Flourishing Scale (FS)	58	44.30 (6.59)	.845	.422
Scale of Positive and Negative Emotion - Balance (SPANB)	59	9.03 (5.78)	.778	.226
Satisfaction with Life Scale (SWLS)	58	25.97 (5.96)	.865	.576

SD=Standard Deviation;

^aReliability of the SF-12v2 was assessed using the QualityMetric Health Outcomes™ Scoring Software 4.0. All four factors of the MCS passed both convergent and divergent validity tests, and all four factors of the PCS passed divergent validity tests. Only one (General Health) of four factors was slightly below the cut-off point for convergent validity; the other three passed.

Table 4-3: Mean scale scores by sex and age category at baseline (T1)

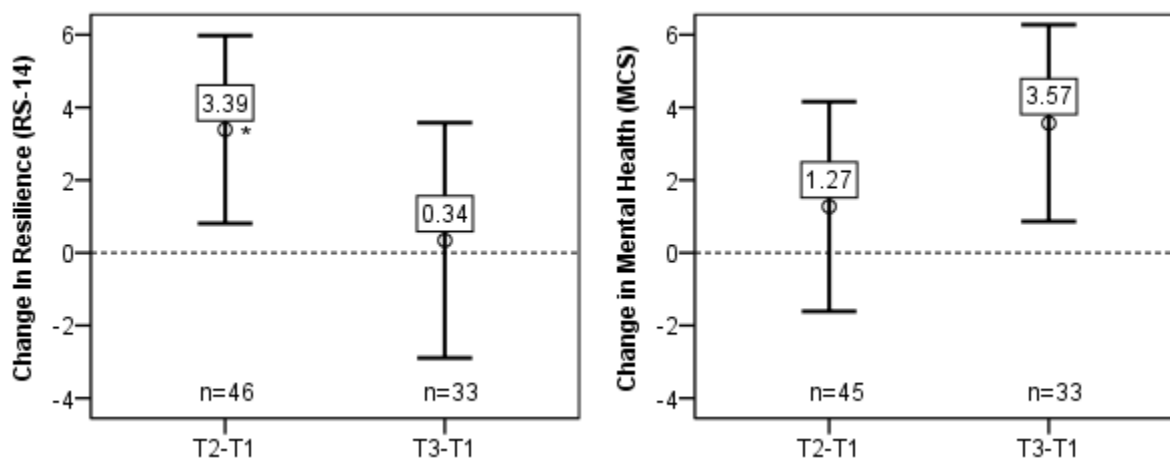
Scale	Sex		Age Category	
	Male ^a	Female ^a	12-14 ^b	15-18 ^b
	(SD)	(SD)	(SD)	(SD)
Resilience Scale	71.30	76.32	71.75	74.74
(RS-14)	(11.06)	(8.81)	(10.72)	(9.84)
Mental Component Score	47.96	47.71	48.46	46.86
(MCS from SF-12v2)	(8.63)	(7.55)	(8.62)	(7.71)
Physical Component Score	47.55	45.21	43.98	50.65
(PCS from SF-12v2)	(7.93)	(7.32)	(7.84)	(4.94)
Self Esteem Scale	16.95	17.57	17.11	17.19
(SES)	(3.16)	(3.23)	(3.13)	(3.37)
Flourishing Scale	43.97	44.88	43.42	45.53
(FS)	(6.70)	(6.52)	(7.30)	(5.10)
Scale of Positive and Negative Emotion	8.92	9.23	9.26	8.76
(SPANE)	(6.11)	(5.25)	(5.81)	(5.95)
Satisfaction with Life Scale	25.89	24.91	26.22	25.29
(SWLS)	(6.20)	(6.67)	(6.39)	(5.28)

^aSample size for males was n=37 or 38 depending on scale; females n=21.

^bSample size for adolescents aged 12-14 was n=36 or 37 depending on scale; ages 15-18, n=21.

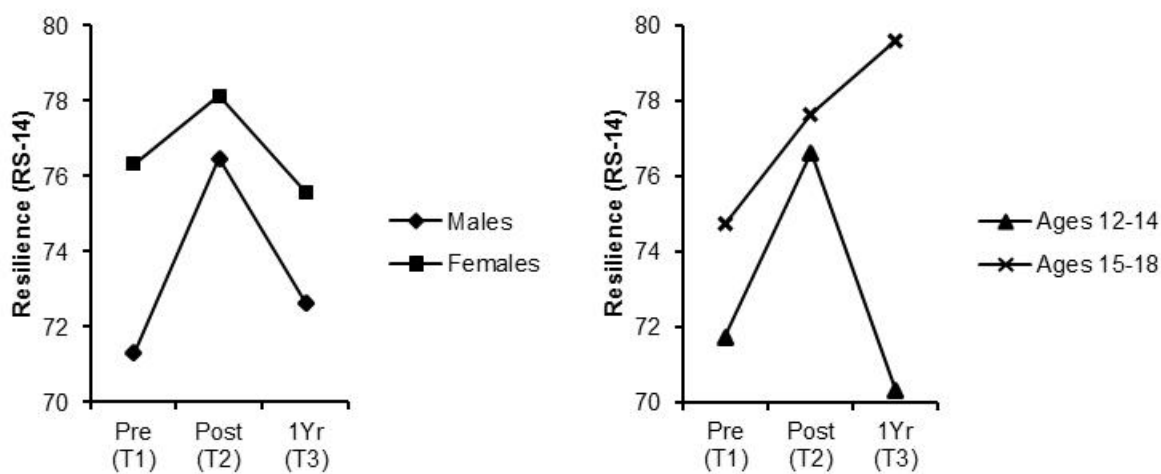
The HWBQ was also administered one year post-intervention (T3) to explore whether any changes in resilience were stable over time. There were 33 matched pairs between T1 and T3, and the change in resilience was very small (Mean Δ =-.34, ES=.03). Assessing mental health via the MCS was designed to confirm any noted changes in resilience. The mean MCS score increased over the three time periods, and the mean change from T3 to T1 was small to medium (Mean Δ =3.57; ES=.40). Figure 4-1 displays the change score analysis and confidence intervals

for the RS-14 and MCS over the three different time periods. Both resilience and mental health scores improved from T1 to T2, however there was a divergence of results at T3. Mental health scores continued to improve at T3 compared to T2 and T1, however resilience scores at T3 were lower compared to T2, reverting back to a level similar to the original pre-OALE score at T1.



*p=0.011 for increase in resilience from Pre-OALE (T1) to Post-OALE (T2).

Figure 4-1: Change in resilience and mental health over three different time periods



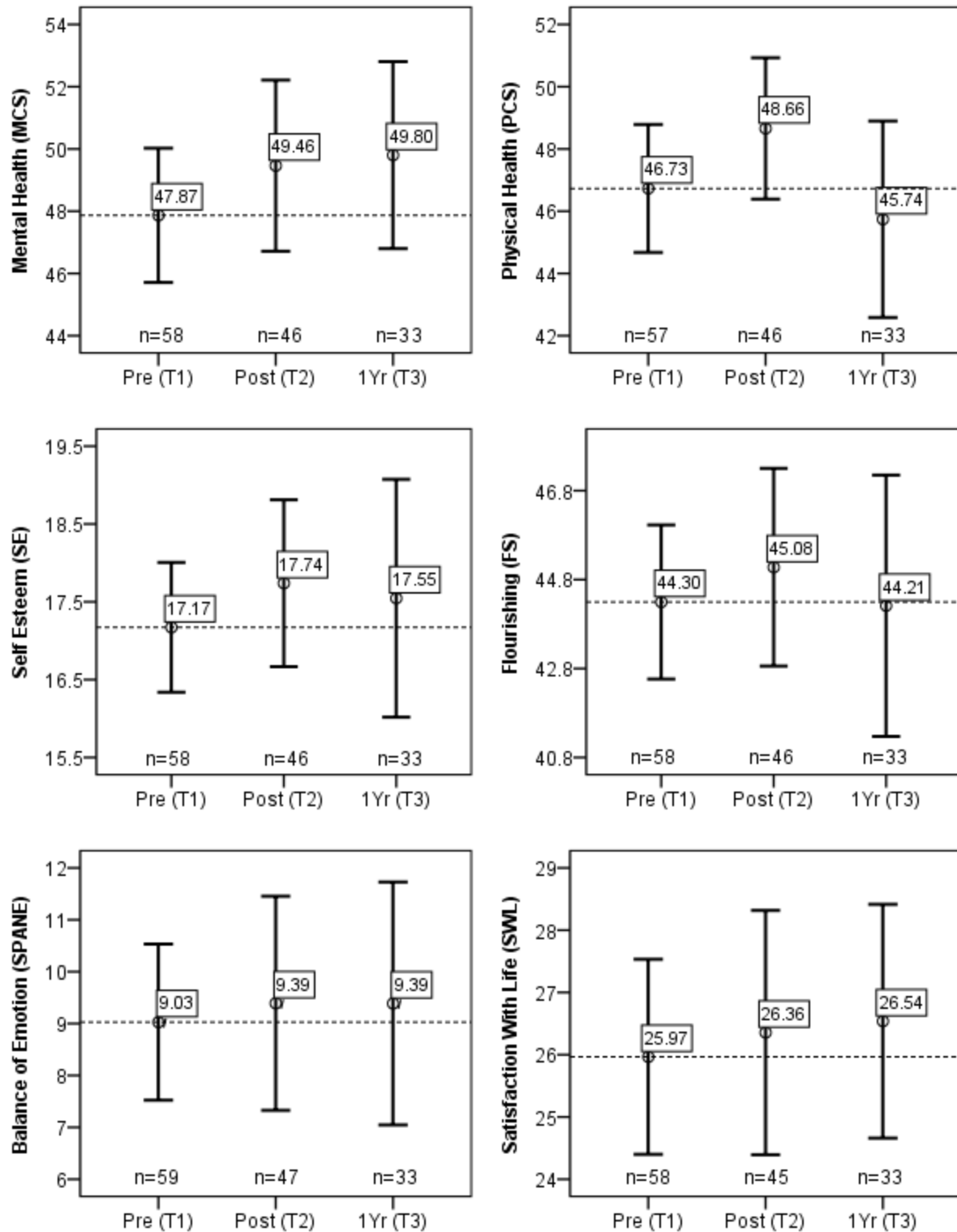
Note. Sub-group sample size at T1 is listed in footnote of Table 4-3; sample size decreases dramatically at T2 and T3.

Figure 4-2: Change in resilience by sex and age group

Figure 4-2 displays an exploratory sub-group analysis of resilience by sex and age category. There seemed to be a trend towards more pronounced effects for younger males (ages 12-14 years) from T1 to T2. However, this figure must be interpreted with caution due to small sample sizes. Most participants seemed to revert back to pre-OALE levels of resilience one year after completing the program (T3).

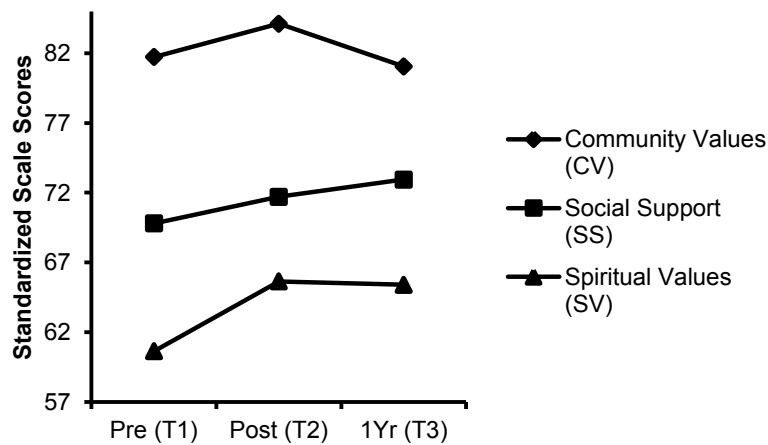
The results presented thus far suggest that the OALE had an important short-term effect on resilience. No inference testing was completed with the other well-being scales, however the data was examined for observable trends in order to explore possible changes in other dimensions of well-being. Figure 4-3 depicts these trends over time for the six additional scales from the HWBQ. All six scales showed a positive change from T1 to T2, with this trend remaining at T3 for mental health (MCS), balance of emotion (SPANE), and satisfaction with life (SWL).

The individual items (questions) related to social support, spiritual values, and community values were each combined to provide a summary score for each construct. These constructs appeared to behave as scales since internal consistency (social support: $\alpha=0.865$; spiritual values: $\alpha=0.774$; community values: $\alpha=0.743$) and mean inter-item correlations (social support: $IIC=0.480$; spiritual values: $IIC=0.462$; community values: $IIC=0.434$) were similar to the established scales in Table 4-2. Figure 4-4 portrays changes over the three time periods for social support, spiritual values, and community values. The trends were very similar to the scales portrayed in Figure 4-3. All outcomes improved at T2, but there were varied results at T3 with some scales decreasing.



Note. Means of scale scores identified at each time period (T1, T2, T3); error bars indicate 95% Confidence Interval (CI).

Figure 4-3: Exploring scale score changes over three different time periods



Note. Means of individual sum scores (SS, SV, and CV) were transformed and standardized from 0 to 100 for comparison purposes.

Figure 4-4: Exploring other trends over three different time periods

There were 33 adolescents who completed the HWBQ at T3 and 26 (78.8%) who responded to the open-ended questions appended to the end of the questionnaire. These questions were designed for self-reflection, but also to probe for other intervening factors that may have contributed to any changes in resilience and mental health over the 12-month period after completion of the OALE. Most respondents indicated that the experience was beneficial for personal growth (gaining independence, interacting with others, learning skills, persevering, and contributing to success at school) with comments such as: “I am more independent and able to take care of myself,” “it helped with leadership and group work,” and “I do my homework now, and complete work that has to be done.” No respondents reported that the OALE was detrimental in any way.

There were a number of intervening factors identified that may have contributed to changes in resilience and well-being. There were numerous comments related to other events in the broader community that may have had an impact on their resilience and mental health over the year

following the OALE. There were six comments describing recent fatalities that seemed to have a negative impact and several comments related to life stressors (e.g. school projects) and bad influences (friends) that led to bad choices (e.g. consuming alcohol). On the other hand, there were five comments describing community and school programs (other than the OALE) that had a positive impact. The most common intervening factor related to changes in family and living situation. Many adolescents described significant events in the stability of their home life related to moving, changes in family membership (e.g. cousins moving in or out), and relationships between family members. A few of these comments were favourable such as “new home contributes to my ideal life.” However, many of the comments described unfavourable circumstances such as “my family recently got into a fight and so I moved somewhere else for a while to figure things out.” Most of the intervening factors seemed to be unrelated to the OALE, however one adolescent related a benefit of the OALE (perseverance) directly to an intervening factor:

On the OALE, 2nd day through the trip, I wanted to give up and go home. I was sore, tired, cold, and just wanted to go home. But I stuck through with it to the end. With relation to my uncle’s passing I did exactly that. I stuck through and was strong about it and tried not to let it affect my life somewhat.

4.4 Discussion

This study demonstrated that the OALE was successful in promoting resilience over the short-term (T1 to T2). This finding was consistent with many other outdoor related studies assessing resilience as an outcome variable in non-Aboriginal populations. [65-68, 77-80] However, it is important to note that there were also several outdoor-related studies assessing resilience that did not find statistically significant improvements. [64, 69, 81]

Wagnild suggested norms for the RS-14 were a mean of 84.4 (SD=10.2) with low resilience scores identified as 62.6 (SD=8.04) and high resilience scores identified as 94.4 (SD=2.69). [47] The OALE scores at T1 had a mean of 73.65 (SD=9.78) and this increased to a mean of 77.05 (SD=9.07) at T2. Resilience scores for the OALE participants were below the norm, demonstrating low to medium resilience. The reported ES (0.36) for resilience in the OALE study was also very similar to that reported by three previous meta-analysis of outdoor adventure program outcomes (ES Range=0.31 to 0.38). [28-30] The short-term improvement in resilience identified in this study was also confirmed by qualitative results analyzed during an earlier phase of the study. [43]

Other studies using the RS have measured resilience immediately following the outdoor programs at T2. Researchers of outdoor program effectiveness often administer outcome measures on the last day of the program since it is more convenient and response rates are likely to be higher. However, the assessment of resilience at T2 in this study was delayed until one month following the experience, to avoid *post group euphoria (PGE)*. Marsh and colleagues coined the term PGE to describe the potential for inflated scores when outcome measures are administered immediately following the end of an impactful outdoor program. [82] This study was designed to avoid PGE to ensure that the youth participants were back in their home environment and well-adjusted to their usual living circumstances when they completed the HWBQ following the experience. However, the lower number of respondents at T2 (n=46) reflected the challenges of tracking a dispersed group of Aboriginal participants a month later.

Results from the secondary analyses indicated a somewhat perplexing trend when the resilience scores were compared to the mental health scores. Resilience scores improved significantly between T1 and T2, but then reverted back to pre-test levels at 12-months post (T3).

Conversely, mental health scores continued to improve over the three time periods. Although perplexing in this study, the RS-14 and MCS scores at T3 reflect a similar trend in other outcome studies assessing the impact of outdoor adventure experiences. The RS-14 pattern from T1 to T2 is consistent with other adventure therapy research with adolescents, which consistently demonstrates favorable outcomes for global mental health measures. [32-36] However, the long-term sustainability (~T3) of these outcomes is less consistent.

In adventure therapy studies involving youth at risk, both Russell [83] and Harper et al. [84] included a 12-month post assessment using behavioural and mental health constructs. Post-test scores were higher than pre-test scores, but there was some variability in sub-scale scores at the 12-month post assessment. [83, 84] The use of follow-up aftercare and support for some of the youth in these studies [83, 84] helped explain the positive changes in some scales over the year. In the meta-analysis of outdoor adventure programs completed by Hattie et al., [30] the authors found that there was an average additional increase ($ES=.17$) at the one year post-test point compared to the post-test point immediately following the programs' completion. This suggests that improvements were not only maintained, but also improved over time. There were 96 studies included in this meta-analysis, reflecting a wide variety of adventure education programs both with and without aftercare. In comparison, the OALE results in this study were mixed, suggesting that there were intervening factors that may have impacted adolescent judgments on their self-reported scores for resilience and mental health.

The qualitative results helped to explain some of these intervening factors. Nearly all of the participants who responded to the open-ended questions at T3 ($n=26$) directly acknowledged that the OALE was beneficial. Yet, many of them also identified major changes in their life circumstances. The most prevalent comments related to changes in family living situation. In

some ways, this is not surprising given that only 37.5% of the respondents at T3 reported living with both parents. Instability in family living situation is one of the most common determinants of health identified in the literature for Aboriginal populations [6-8]. Hence, involving families in future OALE experiences is an opportunity worth exploring.

Researchers involved in evaluating adventure therapy programs have highlighted the importance of follow-up or aftercare systems that involve participants after the initial immersive outdoor experience has been completed [84, 85]. Introducing post-OALE programming is also a future opportunity worth exploring, especially for younger males (ages 12-14), since their resilience scores decreased more dramatically from T2 to T3 (see Figure 2). One must exercise caution however, since the small sample size for sub-groups at T3 presented difficulties interpreting other observable differences, such as the continued increase in resilience for participants 15-18 years (n=12).

All of the HWBQ scales performed relatively well in this study as evidenced by internal consistency and mean inter-item correlations (see Table 2). These scores were similar to those published by the original scale developers. Beyond resilience, every other well-being construct score measured in this study (mental and physical health, flourishing, balance of emotion, satisfaction with life, self-esteem, social support, community and spiritual values) demonstrated elevated scores one month after completion of the program (T2). The mean scores for these scales provide a unique glimpse into the self-reported health of adolescents from one First Nations reserve.

Limitations

There were several limitations to this study. The relatively small sample size available for analysis restricted the number of variables and factors that could be examined. As a result, it was not possible to adjust for demographic characteristics such as age and gender. To address this limitation, resilience was identified *a priori* as the primary construct (factor) examined, which was confirmed by results from a broader evaluation of mental health using the MCS.

There were other potential limitations related to lack of randomization, low response rates from the comparison group, and potential for sample selection bias. Study recruitment is a known challenge in this population. Nevertheless, given the small population size (N=450) of adolescents 12 to 18 years, it was remarkable that 59 (13.1%) available data sets were obtained at T1. Further, the ES from RS-14 change scores from T1 to T2 was evident and statistically significant. Despite the small population, it is important to note that Wikwemikong is one of the largest First Nations reserves in Ontario. This highlights the challenges associated with using study designs involving inference testing that use samples drawn from relatively small populations such as those in First Nations communities.

The scales included in the HWBQ were sourced from non-Aboriginal contexts and primarily for adult populations. The results would have been strengthened by the inclusion of a measure designed for Aboriginal youth. Since the research primarily involved only one community, it is important to encourage replication of this intervention in other Aboriginal communities in order to assess the generalizability of the results. It is important to note that these findings and focus on self-reported health from one First Nations community is relatively rare in comparison to the availability of similar data for other First Nations communities. There is a compelling need to

disaggregate data to provide information sources that support local decision-making within specific Aboriginal communities. [86]

4.5 Conclusion

The OALE program had a positive impact on resilience for adolescents in Wikwemikong, over the short term. Intermediate reinforcement programs are recommended to sustain benefits over time since the OALE was a summer program that was difficult to maintain through the school year. Inter-sectorial planning across departments (i.e. health, education, and justice) within Wikwemikong may lead to innovative ways to revise and expand the OALE, with the goal of retaining benefits and reaching specific sub-groups (younger children, families, men only, and women only) and other specific clinical populations in the community.

Outcome scores from seven different well-being scales provide a unique glimpse into the self-reported health and well-being for adolescents within one First Nations community in Canada. The RS-14 seemed to function well, and is recommended for use in studies with other Aboriginal adolescent populations. However, none of the scales (including the RS-14) in the HWBQ package was developed for use with Aboriginal populations, despite an extensive literature review to identify other suitable scales. Thus, this project identified a pressing need to develop culturally appropriate measures of health for Aboriginal children and youth in Canada. These measures could then be used to evaluate culturally appropriate programming to inform local health planning. This work has now begun. [87] The success and effectiveness of the OALE in Wikwemikong is encouraging. More empirical studies are required to address whether the OALE (or similar outdoor type interventions) may be effective within other First Nations communities.

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Chapter 5: Paper #4 - Connecting to the Good Life through Outdoor Adventure Leadership Experiences Designed for Indigenous Youth (Phase 3)

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Context for the article:

This chapter is a revised version of the fourth integrated article that reports on the qualitative methods and findings related to Phase 3 of the study. The findings from this phase addressed the following research question: How does the OALE promote resilience and well-being for the youth from Wikwemikong? Appendix I contains the data collection guide that was developed for use in the field during each OALE expedition.

Abstract:

Indigenous voices are largely silent in the outdoor adventure education and wilderness therapy literature. The purpose of this research collaboration was to understand how a 10-day outdoor adventure leadership experience (OALE) may promote resilience and well-being for Indigenous youth through their participation in the program. The process was examined through a community-based participatory research project that sought insight from the perspectives of one First Nations community in Canada, using qualitative methods. The OALE was implemented with six different groups for a total of 43 youth participants (ages 11.9 to 18.7 years) from Wikwemikong Unceded Indian Reserve in Northeastern Ontario. Field data was collected from multiple sources including participant interviews, journals, focus groups, and talking circles. Using a critical ethnographic lens, we analyzed the data inductively to understand how the OALE promoted resilience and well-being. We listened to Indigenous voices, adhered to principles of Indigenous coding for thematic content, and respected Indigenous ways of knowing for interpreting results. The process of *connecting to the Good Life (Anishinaabe Bimaadziwin)*, or *waking up (nsidwaaswok) to the Good Life* emerged as the dominant theme. Connecting to the Good Life may offer a simple yet compelling way to understand the net impact of the OALE.

Key Words:

Outdoor Education; Adventure Therapy; Community-Based Participatory Research; Expedition Ethnography; Indigenous Health; Holistic Health

5.1 Introduction

Many outdoor education and therapeutic adventure programs incorporate backcountry travel activities with origins that can be traced to the practices, traditions, and cultures of the Indigenous people of a country or territory. This is particularly characteristic of the Canadian approach to outdoor adventure and programming, [1-6] since Canada is a vast nation with large tracts of untouched wilderness which includes the traditional territory of Indigenous peoples. Harper et al. [3] described the influence of First Nation's travel practices and the iconic role of the canoe for wilderness travel in Canada. Potter and Henderson [2] used the term *Indigenous knowledge* (IK) to describe that knowledge which is native to the place. Cohn [7] used the term *Indigenous ways* to describe the “wholeness of the indigenous world-view, philosophy, value base and action,” (p. 16) suggesting that Indigenous perspectives may fill a void in the philosophical foundation of outdoor education. Outdoor education and therapeutic adventure programs in Canada may reflect some Indigenous approaches and practices, however the voices of Indigenous people are essential to meaningful discourse on Indigenous perspectives in adventure programming.

Indigenous people in Canada are often referred to as Aboriginal People, which is a term used to collectively describe First Nations, Inuit and Métis people in Canada. The population of Aboriginal People in Canada is 1.4 million and represents 4.3% of the Canadian population. [8] Only New Zealand has a higher proportion of Indigenous people. The Aboriginal population in Canada is growing rapidly. Furthermore, the median age is 28 years, indicating that the population consists largely of children and adolescents. [8] First Nations account for 60.8% of all Aboriginal people in Canada. There are over 600 distinct First Nations communities across Canada and over 60 distinct languages reported by First Nations people [8]. First Nations

communities are usually geographically located on reserves that were established through historical treaties and agreements with the federal government. Approximately half of First Nations people in Canada live on these reserves, [8] and most of the reserves are located on or near the traditional territory of the First Nations residing there. Thus, the reserve lands and surrounding regions have tremendous historical, cultural, and spiritual significance.

This paper reports on the qualitative evaluation of a larger collaborative project to develop, implement, and evaluate an outdoor adventure leadership experience (OALE) for youth ages 12-18 from Wikwemikong Unceded Indian Reserve in Northeastern Ontario, Canada [for an overview see 9]. The OALE program involved a 10-day journey towards Wikwemikong through the traditional territory of the community. The route was intentionally designed to pass through historical hunting and harvesting (berries and medicine) areas, past ancient burial grounds, through an old battle site commemorated by pictographs, and it included camping at an abandoned village site. Programming principles and training modules were implemented experientially during the journey by trained staff and facilitators from Wikwemikong. The program included many traditional ceremonies and practices such as departure and homecoming ceremonies; smudging; offering of tobacco each day; praying to the Creator; teachings from an Elder; and sharing each evening in a talking circle format. [10]

Promoting resilience and well-being were identified as primary goals of the program by the community leaders from Wikwemikong and researchers, primarily from Laurentian University in Sudbury, Ontario. Indeed, helping Aboriginal adolescents develop resilience and a sense of identity are well-established strategic objectives of the federal government and agencies across the country. [11-14] These strategies are meant to address the prevalence of mental health issues and incidence of suicide within this population group.

Wikwemikong is one of the largest reserves in Ontario, with three distinct nations residing there: the Ojibway, Odawa, and Pottawatomi nations. Historically, these distinct groups formed the Three Fires Confederacy, and today Wikwemikong community members self-identify collectively as Anishinaabe. [15] The Anishinaabe worldview in Wikwemikong is often represented by the Medicine Wheel, which is also one of the most prevalent frameworks of Aboriginal health in Canada [16]. The Medicine Wheel is represented by a circle, and it includes the four dimensions of health and well-being: body or physical, mental or mind, emotional or heart, spiritual or spirit. It reflects a holistic and communal view of well-being that includes the individual, family, community, and the natural world. [17-19] Thus, the Medicine Wheel was an important theoretical framework that influenced many aspects of the OALE program development and research. [20] Figure 5-1 graphically portrays the Medicine Wheel¹.

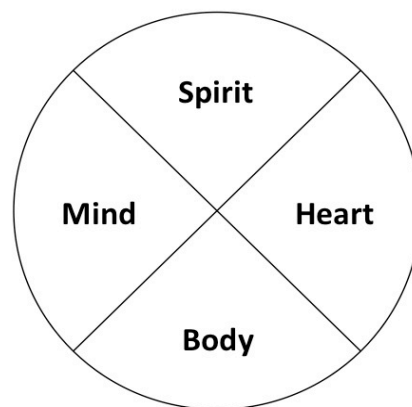


Figure 5-1: The Medicine Wheel

¹ There are many different versions of the Medicine Wheel with the four dimensions represented in different quadrants. This is the version used by the Nahndahweh Tchigehgamig Wikwemikong Health Centre in Wikwemikong.

In many ways, aspects of the OALE program were similar to other well-established wilderness travel programs such as those at Outward Bound. In fact, the Outward Bound Process Model [21] was used as one of the frameworks, along with the Medicine Wheel, for the development of the OALE [20]. The OALE used canoe tripping as the mode of travel, and the selected route required daily travel in order to reach the final destination. There were many natural challenges such as rapids, portages, navigation, and open water crossings. Participants were assigned day leadership responsibilities, and the experience included a half-day solo component. Figure 5-2 portrays a map of the OALE route with an outline of the daily travel experiences.

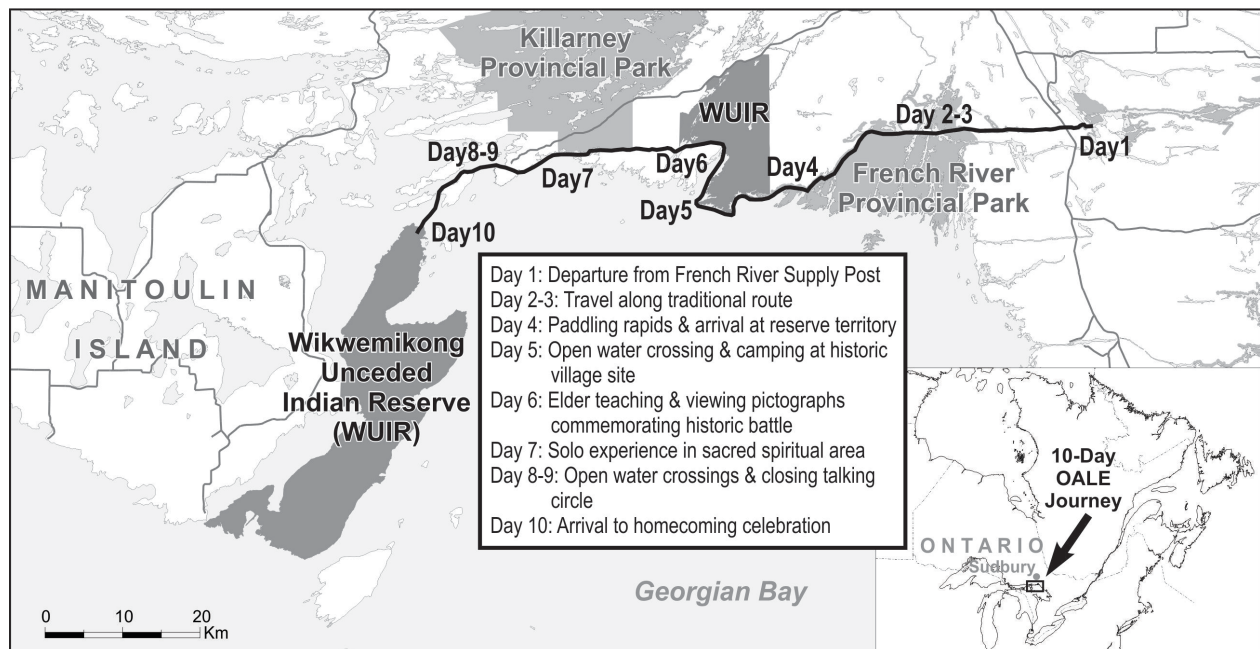


Figure 5-2: OALE canoe route

The OALE program was developed to be culturally relevant, [22] and it has been evaluated from both quantitative and qualitative perspectives. The quantitative evaluation demonstrated short-term improvements in resilience as measured by the 14-item Resilience Scale. [22] The simple operational definition of resilience guiding this research was “the ability to successfully cope with change and misfortune.” [23] The purpose of this study was to examine qualitatively how

the OALE functioned to promote resilience and well-being for First Nations youth from one community population in Canada.

5.2 Methods

This paper is the result of collaboration between community leaders from Wikwemikong and researchers from Laurentian University. Principles of community-based participatory research (CBPR) guided the study. [24-26] The literature provides numerous examples and recommendations related to CBPR projects with Aboriginal communities. [27-29] This collaboration also respected the OCAP (ownership, control, access, and possession) principles for research with First Nations communities. [30] Operationally, the participatory approach was led by a community-based research steering committee that served to review, approve, and guide the research process. Ethical approval was received from Laurentian University. The Manitoulin Aboriginal Research Review Committee, a regional organization, also approved the project. Community support in Wikwemikong was granted by the Health Services Committee and Chief and Council. A signed Research Agreement clarified expectations and responsibilities for both Laurentian University and Wikwemikong. The methods were focused on the 10-day OALE expedition and followed an ethnographic approach. [31]

Expedition Ethnography

Ethnography as method is an examination of culture [32]; it provides a rich description of the patterns of behaviour of individuals and groups within a particular context. [33] The hallmarks of ethnographic methods are participant observation, [32] an immersive experience, [32, 34] and triangulation through multiple sources of data collection. [34-37] Ethnographers immerse themselves in an experience by participating in the culture and by gathering information firsthand through careful observation and documentation of the many varied interactions that

they experience, either planned or unplanned. With historical roots in anthropology, ethnography has a rich tradition of extensive large-scale studies of entire cultures or societies. [32, 34] However, focused ethnography [33] and peopled ethnography [38, 39] are concerned with understanding specific problems or phenomena within a particular people or community, and in a particular context and timeframe. Focused ethnography is directed towards formulating or understanding micro-substantive theory. [37] Micro-substantive theory is an explanation of the behaviour of particular individuals or groups in a particular context. [37, 40] Hence, we used ethnographic methods in a focused manner to help us understand the mechanisms or factors through which the OALE impacted resilience and well-being for the youth who participated. The ethnography was focused on the 10-day expedition, and was bounded by a specific timeframe, a collection of participants and staff leaders, and travel through a particular geographic area.

Given the over-arching fundamentals of CBPR and OCAP governing our collaboration, we also followed principles of critical ethnography. [41-43] Rather than simple cultural description, critical ethnography “refers to the reflective process of choosing between conceptual alternatives and making value-laden judgments of meaning and method to challenge research, policy, and other forms of human activity.” [43] Thomas described different types of critical ethnography as a duality or balance between rigor and relevance, suggesting that participatory research is akin to relevant critical ethnography. [43]

Critical ethnography is also concerned with positionality [42] and reflexivity [42, 44] of the researcher. “Positionality is vital because it forces us to acknowledge our own power, privilege, and biases just as we are denouncing the power structures that surround our subjects.” [42, p. 7]. Reflexivity is the process of turning back on ourselves to understand our own paradigms [42]; it

also stems from a fundamental understanding that the research is often outside of ourselves, but also inextricably interconnected with ourselves since the researcher and researched interact together. [44] The first author (SR) was not a member of the Wikwemikong community (an outsider). However, the unit of focus for the analysis was on travel groups and not the larger community. Through full participation on each OALE expedition, the first author became a member of the OALE community, and the line between outsider and insider became less clear. [45, 46] Thus, in collaboration with members of the Wikwemikong community, the ethnographic analysis became possible. Rather than describing this type of outdoor ethnographic approach as focused, peopled, or critical, it may be more aptly characterized as an *expedition ethnography* since the 10-day OALE expedition was the cultural context under study.

Data Collection and Analysis

Data was collected in the field from each travel group throughout each expedition during the summer of 2009. There were three 10-day expeditions consisting of two separate travel groups on each expedition, for a total of six groups. A total of 43 youth, ages 11.9-18.7 years, and 17 staff leaders (including researchers) participated in the six groups. The mean age of the youth was 14.7 years, and there were 16 (37%) female youth participants. We recorded observations and collected data from multiple sources for each group on each excursion: journals, interviews, talking circles, and Elder Teachings.

The transcription and coding of the data occurred throughout, however the main qualitative analyses were collaborative. This collaborative analysis began after the last expedition of the summer, through a process of four separate focus groups with staff, guides, and participants from the OALE. The purpose of these focus groups was to review the data and revise the provisional coded categories that emerged. The focus groups were also audio-recorded since they were

considered a critical form of respondent validity. [37] The focus group data also contributed a retrospective perspective since it occurred after the OALE expeditions were complete. Beyond the final focus groups, the data analysis process spanned three-and-a-half years. It included numerous community meetings, individual member checks with youth participants and staff leaders, and oversight by Elders and the Community Research Steering Committee in Wikwemikong. Table 5-1 portrays all data sources collected, transcribed, and analyzed.

Table 5-1: Data collected, transcribed, and analyzed from all sources

Type of Source	# of Sources	Description
In the field during OALE:		
Interviews with youth Participants	14	Completed during last three to four days; two recorded on Day 2
Interviews with staff leaders	5	Completed during last three to four days
Evening talking circles	13	Most recorded during last three to four days; two recorded on Day 2 & 4
Journals from participants	30	Included entries from all 10 days
Journals from staff leaders	10	Included entries from all 10 days
Journals from researchers	4	Included entries from all 10 days
Elder teachings and discussion	3	Recorded on Day 6 each trip
Focus groups after the OALE:		
Program review and critique	1	Completed two days after last OALE
Outcome review and critique (resilience and well-being)	1	Completed two days after last OALE
Review of provisional coded categories	1	Completed two weeks after last OALE
Review of provisional themes and connecting concept emerged	1	Completed three months after last OALE

All data was transcribed verbatim from either digital audio files (interviews, talking circles, Elder teachings, and focus groups) or photocopies of journals. Microsoft Office and Excel programs were used initially to analyze data from the 14 participant interviews, and NVivo 9 was used for analysis of the entire set of data transcribed from all sources (interviews, talking circles, focus groups, Elder teachings, and journals). The raw data (digital audio files and photocopied journals) were reviewed many times throughout the analysis for accuracy and to obtain relevant contextual information. In total, there were over 200,000 words transcribed and analyzed from all sources over the course of three-and-a-half years (2009-12).

Approaches to ethnographic analysis are diverse, [35] however many approaches are characteristically inductive in nature [32] and often follow guidelines from grounded theory, [40] looking for patterns of thought and behaviour, building concepts and theory from the ground up. [36, 37]

Validity

The collaborative nature of CBPR was an implicit validation process since the research involved community members directly; hence the results reflected a unique community perspective. Beyond CBPR, triangulation was the main strategy employed for validity. [34-37] Data were collected through participant observation, interviews, talking circles, and journals. Visual data in the form of photos and video augmented these other primary data sources. Each of the six trips provided six separate representations of a social microcosm, [47] increasing the likelihood of transferability to the adolescent population in Wikwemikong. Respondent validation [37] was possible through follow-up focus groups with the youth and leaders to confirm responses and meaning, and also indirectly through the process of comparing a participant's interview data to their respective journal. Further, both the raw and analyzed data was reviewed through a process

described by Angrosino as a constant validity check. [35] The constant validity check involved employing multiple perspectives to view the data, including the perspectives of research team members, OALE staff and youth participants, the local Health Services Director and Elders from the community of Wikwemikong. Thus, validity through triangulation was enhanced via multiple sources of data, multiple travel groups, the processes of respondent validity, and constant validity checking.

5.3 The Evolution of the Research Question

One of the most significant findings from this research stemmed from the evolution of the research question over time. This provides evidence of the reflexive nature of the analysis process, and it implies that there was a shift in perspective, based on a realization that the initial research question was not the most appropriate question for the culture and context. The research question and each revision are described chronologically in the following paragraphs.

The initial a priori research question was: **How does the OALE promote resilience and well-being?** Essentially, the OALE was found to promote resilience and well-being through a process of *connecting* externally to people, animals, plants, the Creator, ancestors, and other elements in nature. The process was also a spiritual journey that involved connecting internally where each youth learned and reflected. They began to realize more about who they were, where they came from, and what they wanted to accomplish during the OALE, and in life beyond the program.

One youth described the connecting process this way:

Physically I am stronger from paddling. I have got my muscles back. I feel energized to be out here. Mentally, I just look forward to it, and it makes me think a lot about my ancestors that travelled here so long ago. It makes me feel good. It's a great honour. Spiritually, I feel gifted being out here. It's like I am connecting with my inner person. I feel connected with something. It makes me feel really good about being native and

paddling. Emotionally, I have my ups and down, but overall I am happy. (Youth participant, Interview, Day 8, Trip 2)

Initially the connecting concept emerged as a sensitizing concept, [37] which was further refined through the process of crystallization. [36] After the early analysis, and during the first year following the experience (2009-10), a provisional hypothesis [35, 40] and framework revolved around the central concept of connecting, which led to a revised research question (Murchison, 2010) for continued analysis: **How does connecting help promote resilience and well-being for the youth?** The connecting concept was refined further through analysis of the remaining transcribed data (interviews with staff leaders, talking circles, focus groups, and all trip journals from participants and staff leaders) over the next year (2010-11), through various meetings with community members at the Waasa Naabin Youth Services Centre in Wikwemikong, and with the guidance from community leaders and Elders.

Elder (and co-author) Corbiere described the OALE process of connecting in reference to *Anishinaabe Bimaadziwin*², which is a concept that can be literally translated as the *Good Life*. Connecting to the Good Life was a cultural and spiritual process that reflected a deeply rooted historical context:

I think for myself the connection came out of a knowledge of history, our traditions, and our culture. And you know, every time we went around a turn in the river, even though I

² Anishinaabe Bimaadziwin appears in the literature with several different variations of spelling that may differ than the way it is spelled in this thesis. This spelling of the terms was also reviewed and confirmed by Elders in Wikwemikong.

was anticipating what was coming up, there was a lot of strength knowing this is what we've done for thousands and thousands of years, and you know my ancestors were doing it, and you can feel that. (Reflections of a staff leader, Focus Group 4, three months after last OALE)

Similar to the concept of connecting, the importance of Anishinaabe Bimaadziwin was a second sensitizing concept that also evolved through a process of collaborative crystallization. [36, 37] It eventually replaced resilience and well-being as a more appropriate term describing a culturally appropriate outcome for the youth as they participated in the OALE. Hence, in the final year of analysis (2011-12), the research question was revised a second time through guidance from community leaders and co-author (Corbiere), to become: **How does the OALE help the youth connect to Anishinaabe Bimaadziwin?** This modification also brought the analysis back towards the original research question, since Anishinaabe Bimaadziwin was a concept that better represented resilience and well-being within the community.

The evolution of the research question over a three-and-a-half-year period was characteristic of a profound reflexive process that transpired concurrently with the data analysis. The connecting concept also impacted the worldview of several members of the collaborative team. [48] Each revised research question also represented a shift in positionality for many members of the team, from an outsider towards an insider perspective. [34, 49, 50]

5.4 Connecting with the Good Life (Anishinaabe Bimaadziwin)

The concept of *connecting with the Good Life* described the way in which Wikwemikong youth may have developed resilience and well-being, as they participated in the OALE program. The youth participants were engaged, for a brief concentrated 10-day period, in activities that were historically carried out by their ancestors. The activities they engaged in created opportunities

for connecting with their ancestors, each other, their culture, their community, and ultimately, with their own sense of identity. These connections created a broad holistic notion that was active and inclusive of many interconnected events, experiences, and introspection. According to Elder Corbiere, the OALE resulted in a spiritual realization for many youth that could also be described as re-connecting or awakening. In other words, many of the connections were already there, but not necessarily noticed or realized until the experience reached a threshold level, where the connections became apparent.

Connecting is best represented by a circle since “it’s all within your circle of life... it’s all connected so there was never any of the linear” (Reflections of a staff leader, Focus Group 3, two weeks after last OALE). Connecting is also a verb that connotes action or interaction. This implies that there was a means *through* which connecting occurs: the process of connecting. There were also aspects of the Good Life that the youth were connecting *with*: the objects of connection. On a fundamental level, each youth connected with *creation* and *self*, since these two elements represented each youth’s scope of experience on the 10-day OALE. Creation is simply defined as all that is external to oneself. Self is simply defined as all that is internal to oneself. The process of connecting to the external world (creation) and to different aspects within themselves (self) was through specific events, experiences, or realizations that occurred throughout the 10-day experience.

Although identifying sub-themes helped to further explain the OALE process of connecting, it also revealed a risk in losing the overall interconnectedness of the process, since even self and creation were interconnected. In other words, sub-themes of connecting were not necessarily mutually exclusive; they were overlapping and integrated. One of the staff leaders described this inclusivity during one of the focus groups while reviewing provisional coded categories:

I can already see connecting with ceremony, and connecting with spirit, ancestors and creator, and connecting with nature is one unit. They go, kind of go, together because when you look at when they were on their solo, that's when they were connecting with Mother Earth, the plants, animals; they're looking at their vision and dreams, their prayer ceremony you know, so that kind of all goes together. (Analysis from a staff leader, Focus Group 3, two weeks after last OALE)

Hence, the principle of homogeneity [50] within a particular sub-category and the principle of heterogeneity [50] across sub-categories became less important, since the main theme (connecting) implied interconnectivity between categories rather than a hierarchy of discrete and separate categories. This highlighted a unique Indigenous perspective to analysis that was also congruent with the Medicine Wheel framework. It was more important to view the interconnection between themes and sub-themes rather than through a linear (hierarchical) model that most mainstream researchers follow.

Anishinaabe Bimaadziwin has been described as: “the goal of healing, learning, and life in general” [17, p. 96]; and “a holistic interconnected experience.” [51, p. 163] Hill [18] used the phrase *sense of belonging as connectedness* to describe “the dynamics of relationships between everything in the creation/universe. It is a deep spiritual connection to family, community, nature, the Creator, land, environment, ancestors, and traditional ways of life.” (p. 212) Toulouse [52, p. 2] used a simple formula to describe the good life: “Worldview (universe+view) = Bimaadziwin.” (p. 2) Anishinaabe scholar Rheault provided a more comprehensive definition of the way of a good life:

In order to have a good life one must have a goal. The goal is to be free from illness, to live to the fullest. Bimaadziwin is based on a concept of health and good living. One must work on prevention and not only healing. It is a Holy life. One must eat well, act

well, and live physically, mentally, emotionally and spiritually well. Emotional well-being is a key to Bimaadziwin. [19, p. XXV]

Perhaps more than coincidentally, Anishinaabe Bimaadziwin resonates with characteristics implicit in many wilderness expeditions, beyond the OALE. Canadian scholars, Taylor, Segal, and Harper [53] presented integral systems theory as a simple yet powerful framework for understanding the ecology of a therapeutic adventure context. They used the terms *agency* and *communion* to describe the key elements of all natural systems including the self-system. [53] Communion and agency are useful concepts to further describe the connecting process. By connecting externally, the youth were in communion with various aspects of creation. By connecting internally, the youth were demonstrating agency about who they were and their place in the world. Figure 5-3 is one way to represent the process of connecting to the Good Life within a circle that reflects the Medicine Wheel and embodies the holistic nature of the OALE process. The dotted lines in the figure express agency and communion which also further connect the opposite quadrants together. The youth were experiencing the Good Life at the centre of the circle during the OALE.

The Good Life was shared and learned in a continuous cycle during the OALE. The youth were experiencing the Good Life when they were journeying through the water by canoe. This seemed to make connecting to the Good Life easier than during their daily experiences in Wikwemikong. The possibility of living a Good Life may have been a result of the profound simplicity of the OALE. Experiences that occurred during the OALE unfolded as a developing story that helped the youth realize the metaphoric nature of the experience. [54] For example, water is very significant in Anishinaabe culture since it is so important to life. The start of life begins with babies protected by water in their mother's wombs until the time of birth. Water, a

significant component of the OALE experience (i.e. canoeing, swimming, fishing, drinking), may have represented a cleansing for some youth, and also a form of re-birth since the youth were re-awakened to the possibilities of a Good Life during their OALE journey. While engaged in the OALE, the youth had fewer worries, enabling them to perceive their life as a Good Life, which led to inner peace. Essentially, connecting to the Good Life provided a way to get back to basics, which was simple living, in a fulfilling day-by-day existence.

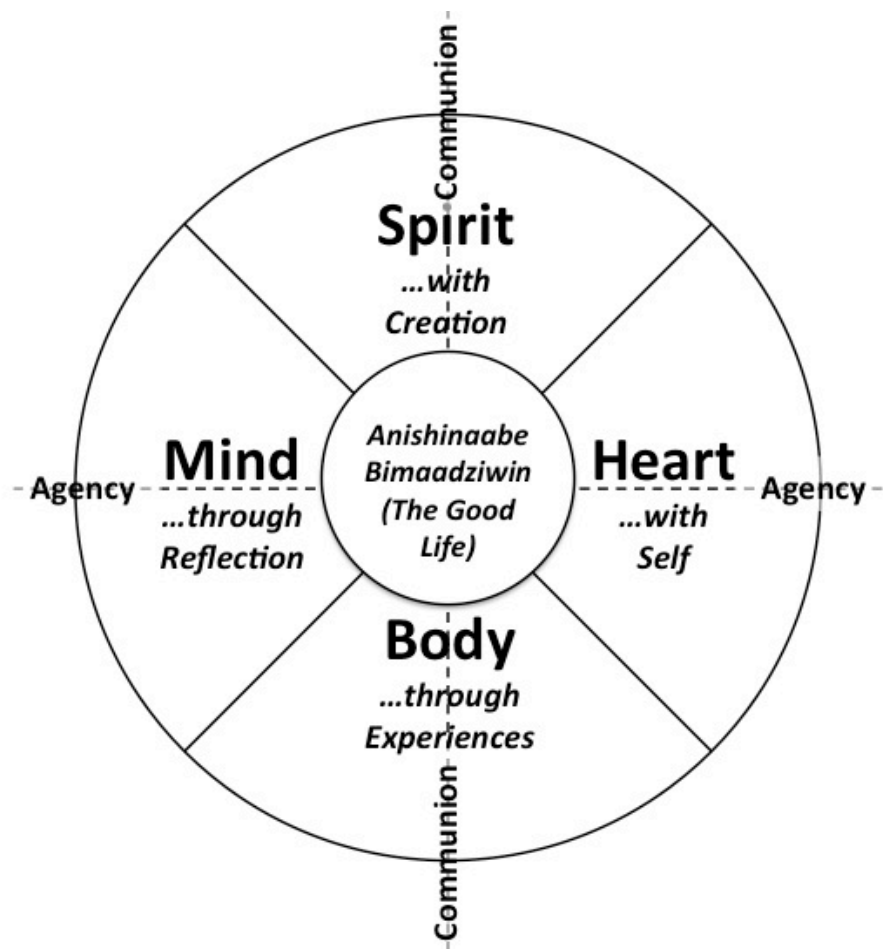


Figure 5-3: Connecting with the Good Life through the OALE

Connecting with Creation

Connecting with creation was the essence of a sensory experience for many of the youth. It was the process of waking up to the world, to all that was external to oneself. The many varied

aspects of creation included the following sub-themes: Mother Earth; people; community and culture; ancestors and Elders; plants and animals; and Creator. Mother Earth was a sub-theme that was differentiated from creation since it represented the tangible world that was always giving. The Creator represented the intangible world, above and below; it referred to the Supreme Being controlling all entities and existence. The youth connected, or communed with these aspects of creation through a variety of sensory experiences or processes. These processes, means, or methods included the following sub-themes: having fun; interacting with nature; interacting with others; engaging in ceremony and prayer; and awakening knowledge. Figure 5-4 depicts the main sub-themes, representing how the youth were in communion during the OALE as they were connecting through experiences with creation.

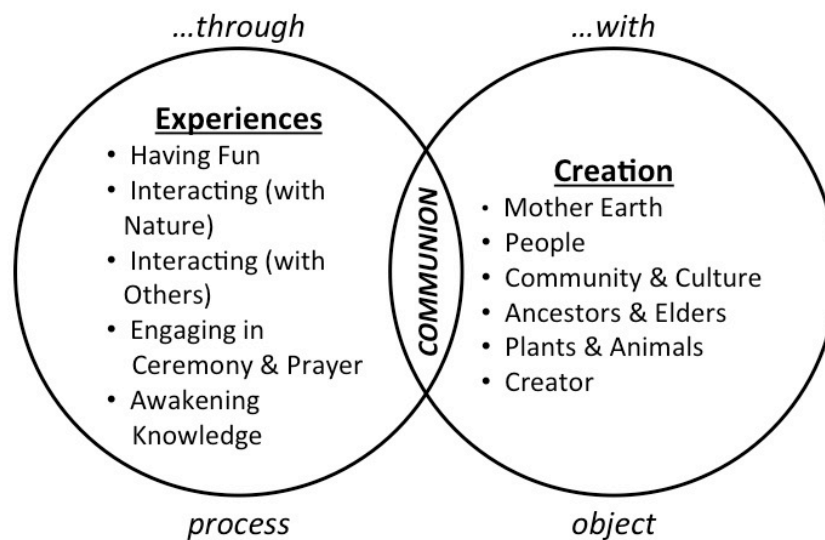


Figure 5-4: Connecting through experiences with creation

Connecting with creation represented a first-order change that was more immediate and experiential, rather than reflective and synthesized. Connecting with creation can be attributed to the impact of a plethora of sensory experiences *with* various objects of connection that occur

through a myriad of processes of connection. Some of these experiences overlapped and the connections became inter-connections; hence references in the source data were often coded to several categories since the connections (sensory experiences) were less linear and more inclusive of several sub-themes together. For instance, the following comment from one youth provides an example: “Earlier, when I skinned a fish, I honoured it by burning its skin and thanking the creator for providing that fish for me.” (Youth participant, Interview, Day 4, Trip 2) This comment was coded to the process themes of *interacting with nature* and *engaging in ceremony and prayer*, and to the object themes of *plants and animals* and *Creator*.

Connecting with Self

Connecting with self was the essence of a reflective experience for many of the youth. It was the process of realizing and developing inner strengths, abilities, and intentions. Connecting with self was a holistic health process that represented connecting with the four dimensions of the Medicine Wheel (physical well-being, mental well-being, emotional well-being, spiritual well-being), and a fifth theme entitled balance and holistic well-being. These dimensions of well-being were used as coded themes since they reflected the original Medicine Wheel framework informing the study; they were also targeted outcomes.

Since resilience was the primary targeted outcome, it was also considered an important sub-theme of mental health for the purposes of coding. Hence, coding to the objects of self followed principles of analytic induction. [50] The youth connected with these aspects or dimensions of self through a variety of reflective experiences or processes: being healthy; learning and reflecting; persevering; being independent and self-reliant; regulating attitude, behaviours and emotions; respecting; and developing a sense of identity. Figure 5-5 portrays the main sub-

themes representing how each youth demonstrated agency by connecting through reflection with self.

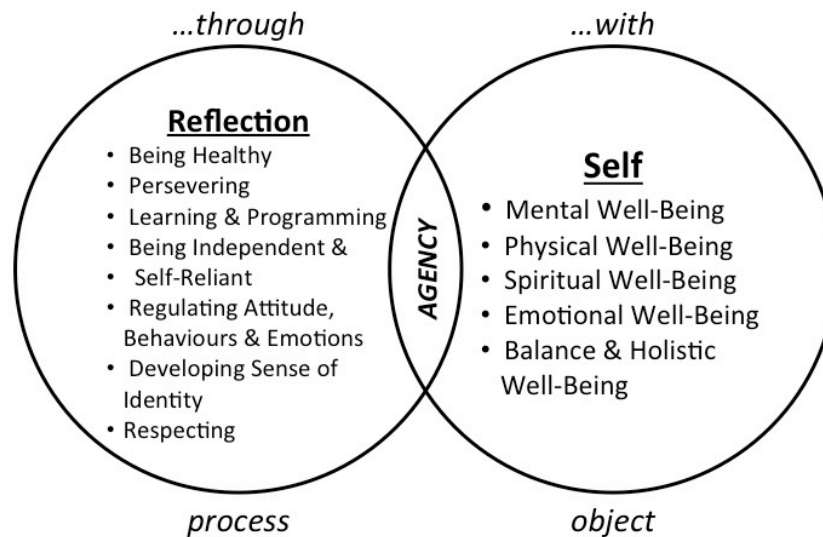


Figure 5-5: Connecting through reflection with self

In contrast to connecting with creation, connecting with self reflected a second-order change that synthesized one or more experiences into a realization, perspective, or reflectively influenced choice/decision for a particular youth. In other words, coded references to connecting with self categories reflected a process that often (but not always) occurred later in the experience after connecting with creation began to occur. Rheault [19] described the four stages of knowledge (kendaaswin) learning in Anishinaabe culture as feeling, observing, reflecting, and doing. These stages seem to support the temporal changes or transition from connecting with creation as a first order sensory learning process (feeling and observing), and connecting with self as a second order process (reflecting). Doing simply refers to the process of applying the knowledge to new situations. Many of the source references related to connecting with self were coded to several themes. Thus, similar to connecting with creation, connecting with self included a vast array of

inter-connections across themes and sub-themes. For instance, the following reference from one youth was coded to *being healthy* and *regulating attitude, behaviours and emotions*; it was also coded to *mental, physical, spiritual, emotional, balance and holistic well-being* (see Figure 5-5):

I found that the more spiritual you are, the happier you are emotionally. I don't want to stereotype or anything, but the more active you are, the happier you are too. It seems like happiness is an emotion, and it lifts your spirits. Once you are happy, you are more active. Once you are active, you are more alert and have a positive outlook on life. That's the best way I could put it. (Youth OALE participant, Interview, Day 6, Trip 3)

There were also numerous references coded to *persevering*, *mental health* and *resilience* (a sub-theme of mental health) such as: "I now keep going. I don't quit when things get rough" (Youth OALE participant, Interview Day 5, Trip 3); "I learned to never give up," and "I push myself even though I am tired" (Two OALE participants, Talking Circle, Day 7, Trip 1). Describing, defining, and providing examples (quotations) of all of the sub-themes involved in connecting with creation (Figure 5-4) and self (Figure 5-5) is beyond the scope of this paper.

Viewing through an Indigenous Lens

Connecting with Anishinaabe Bimaadziwin is an Indigenous process that is best understood from a relevant Indigenous perspective. Cohn [7] suggested that Indigenous perspectives may help provide a framework for some of the evolving philosophical developments in outdoor education and environmental education. Other outdoor scholars have presented concepts that both respect and reflect Indigenous perspectives. Lane [55] used the term embodiment to describe a view of environmental education that stems from Indigenous knowledges. Drengson [5] presented the *wild way* as an Aboriginal-influenced learning and practice system that involves experiential journeying in wild nature. Baker [56] suggested that adventure education programs should embrace landfullness as a way to reconnect with the land. Ellis-Smith [57, 58] challenged

outdoor practitioners to connect to the ancient land, and rediscover their Indigenous heart. Beringer [59] challenged adventure therapists to contemplate the sacred cosmos for a more holistic view of therapy that respects the divine essence of all entities (both animate and inanimate), and Berger and McLeod [60] referenced shamanic practices and traditional medicines as support for the view of nature as partner in the healing process. Finally, Henderson [61] compared the Scandinavian concept of *friluftsliv* with the Canadian Cree Nation concept of *miyupimaatisiium*, which refers to “being alive well” and “connections with land, health, and identity.” (p. 6)

The current discourse on the importance of Indigenous perspectives with respect to outdoor programming and practices is vibrant, and the message is clear. These perspectives are important. However, voices directly from Indigenous programs are lacking. The work of Takano and colleagues [62-65] is one notable exception. Her ethnographic research with Indigenous communities in Northern Canada and Alaska examined land-based environmental education programs that involved subsistence living practices. She used the terms bonding [62, 65] and connecting [63, 64] to describe the deep connection with the land in these cultures. Takano’s findings were similar to those from our study.

Connecting with the Good Life through the OALE is a concept that emerged from dozens of Indigenous voices as they reflected on the meaning of the experience. This provides a unique view through an Indigenous lens. Canadian Indigenous scholar, James Dumont [66] used the term *Indigenous intelligence* to differentiate the worldview and way of knowing that is unique to Indigenous populations. He preferred this term since it implied that there was a completely different way of seeing the world, a particular lens through which Indigenous knowledge and Indigenous ways should be examined. Smylie and colleagues examined the literature and

described Indigenous knowledge generation and application as “participatory, communal and experiential, and reflective of local geography.” [67, p. 141] Castellano [68] suggested that Indigenous knowledge is derived from multiple sources such as traditional, empirical, and revealed knowledge (passed on from ancestors and Elders). These multiple sources seemingly overlap and interact with each other and are characterized as “personal, oral, experiential, holistic, and conveyed in narrative or metaphorical language.” [68, p. 25] Descriptions such as these imply that the youth were accessing their Indigenous intelligence, or becoming aware of Indigenous knowledge through their participation in the OALE. Dumont [66] described Indigenous intelligence as the process of activating knowledge and developing awareness. He summarized Indigenous intelligence as including the following key concepts: centeredness and consciousness; capacity for total responsiveness and multi-faceted responsiveness (spirit, heart, mind, body); connectedness to the collective whole and to the total environment; and value-based seeing, relating, knowing, and doing. [66] Thus, the OALE program may have been a mechanism for the youth to use their Indigenous intelligence to activate knowledge and connect to the Good Life.

These perspectives and descriptions of Indigenous knowledge reflect the worldview implicit in the Medicine Wheel framework, and they also seem to resemble many of the tenets of experiential education, environmental education, and the immersive nature of adventure expeditions. They also confirm and enrich the observations offered by Potter and Henderson [2] and Harper et al. [3] with respect to the influence of Indigenous perspectives on outdoor travel practices and programming in Canada. Henderson and Potter [6] summarized the Canadian meaning of adventure education as an “integrated travel experience, tied into stories of place” (p. 231). These findings from the OALE program in Wikwemikong provide an Indigenous

perspective on an integrated travel experience that was inextricably tied to stories from the past. In fact, connecting to stories of the past seemed to be one of the therapeutic factors contributing to the promotion of resilience and well-being for the youth.

5.5 Limitations and Future Directions

There are several limitations to the findings from this study. The process of connecting was neither ubiquitous nor homogenous. Different youth connected in different ways, at different times, and there may have been some youth that felt more connected and some less connected through the OALE experience. For instance, there were a few youth who indicated that they would not like to repeat the experience because it was very difficult, time-consuming, and resulted in extended periods of discomfort. However, no youth regretted participating, and we were unable to find any participants that did not retrospectively view the experience as positive and beneficial. There were also several negative comments and emotions evident in some data sources (journals, interviews, and talking circles), but these comments usually referred to specific events or experiences that were resolved or reconciled soon after (often the same day or the day after). A follow-up study several years after the experience would provide a valuable retrospective perspective.

Community Elders cautioned that the process of connecting with creation and self was reflective of a small positive change for the youth who participated in the OALE. It only represented a very small step on the path towards the Good Life, and it should not be viewed as an overarching "life changing event." Connecting to the Good Life through the OALE was also a local phenomenon that cannot necessarily be generalizable to other outdoor programs or to other First Nations communities. Since Wikwemikong is characterized by the Three Fires Confederacy, there are different views and interpretations of Anishinaabe Bimaadziwin (the Good Life)

between Ojibway, Odawa, and Pottawatomi traditions. Hence, OALE participants, staff leaders, Elders, and community members may have described or guided interpretation differently. Nevertheless, consensus from a heterogeneous community (Wikwemikong) and support in the literature [7, 55-57, 59-61, 63, 65] provides evidence that the process of connecting to the Good Life may be a relevant concept for other Indigenous communities and perhaps even for outdoor programs in non-Indigenous contexts. This should be explored in future studies that would serve to test or validate different aspects of the Connecting Framework.

5.6 Conclusions and Implications

Connecting with the Good Life (Anishinaabe Bimaadziwin) is a broad comprehensive concept that reflects a culturally relevant learning and change process for the youth from Wikwemikong that occurred in response to the OALE. As they participated through the 10-day OALE, they accumulated both sensory (connecting with creation) and reflective (connecting with self) experiences that made them more aware of their surroundings and who they were as a person. This was a remarkable achievement in a very short period of time. Wikwemikong Elders described the OALE process as an *eye-opener*, helping the youth *wake up* to the Good Life and that through it, their *hearts were opened*. The Anishinaabe term *nsidwaaswok* aptly represents this process as an awakening, since the youth were beginning to become *aware* of the Good Life during the OALE. Dumont used the term activating knowledge to describe the Indigenous learning experience in a created world. Hearts and eyes that were opened; awakening or waking up; activating knowledge; becoming aware; and *nsidwaaswok* may all be bridge terms that help describe the relationship and interaction between connecting with creation and self.

The Aboriginal worldview, as depicted in Figure 5-3, reflects a more integrative and harmonious process of learning, where a learner (OALE participant) is immersed in a rich learning

environment and connects with creation through interaction and observation (sensory experience), and then connects with self through introspection and regulation (reflective experience). Connecting with creation was a first-order change since it began on the first day of the OALE through simple activities such as canoeing, paddling, and conversing with a canoe partner. These activities were initiated immediately due to the active, immersive nature of the experience. Connecting with self was a second-order change since it often began to occur later in the experience when the youth had accumulated enough experiences to reflect on. In other words, the youth had experiences (connecting with creation), and when those experiences reached a threshold level they began to reflect (connecting with self), synthesize their thoughts, and make choices about the meaning of the experiences and how this reflected what they wanted to do and who they were as individuals. For most of the OALE, both connecting with creation and self occurred simultaneously in an interconnected complex fabric of learning and development experience. At times, the raw OALE experiences evoked feelings of connectedness (sensory/communion), at other times the experiences evoked thoughts and decisions (reflective/agency). The connecting process may have helped some of the youth develop resilience and well-being, however it also helped them connect to Anishinaabe Bimaadziwin (Good Life).

The concept of *connecting to the Good Life* emerged as a central theme in the analysis, and is what Strauss and Corbin [40] call a phenomenon. In other words, our understanding of the key mechanism of resilience and well-being development for the youth was through the phenomenon of connecting to self and creation through outdoor adventure leadership experiences. This is the Good Life.

Epilogue

The OALE is now well established in the community of Wikwemikong. Since 2010 it has been organized, federally funded, and carried out by the community. Over the past five summers (2009-2013), over 25% of the on-reserve population of youth ages 12-18 has participated in the program at least once. Many have repeated the experience or applied for staff positions as assistant leaders. Recently, the program was expanded to include a “junior OALE” for youth ages 8-12 years, and to include family trips where youth participated with their parents, guardians, and siblings. We see this as a great success that the program has been fully adopted and is sustainable within the local community.

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Chapter 6: Discussion and Conclusion

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The purpose of this chapter is to integrate the previous four chapters since each of them includes papers submitted for publication in separate journals with distinct submission criteria. This final chapter begins by synthesizing and integrating the key findings from each phase and then elaborates on several key components that were not addressed in sufficient detail in the four papers: the Connecting Framework; reflexivity and positionality; and knowledge transfer. The chapter concludes with details on study limitations, opportunities for future research, and the significance and relevance of the study.

Overall, the goal of this study was to develop, implement, and evaluate an outdoor adventure leadership experience (OALE) that was intentionally designed to promote resilience and well-being for youth ages 12-18 years from the First Nations community of Wikwemikong in Northeastern Ontario. The research followed principles of community-based participatory research (CBPR), [1, 2] and used a 3-phase approach according to a transformative concurrent mixed method research design. [3] The research design is displayed graphically in Chapter 1 (see Figure 1-5).

There were two theoretical frameworks that guided the development of the OALE: (a) The Outward Bound Process Model (OBPM) which is a well-established framework used to reflect the key elements of outdoor adventure and wilderness therapy programming (see Figure 1-2), [4]

and (b) The Medicine Wheel which is one representation of an Indigenous worldview that depicts a holistic health framework used by many First Nations communities across Canada. [5] The Medicine Wheel is also the preferred framework used to guide health promotion programming in Wikwemikong (see Figure 1-2). Appendix A contains Paper #5, which provides more detail about these frameworks with respect to the OALE. Appendix J contains Paper #6, which provides a reflexive perspective on how the OALE research process impacted me and one of my research assistants.

6.1 Summary of Key Findings

There were three main expected outcomes from this research that correspond to each of the three phases of the study. First, it was expected that the development of the OALE program would reflect a modified version of the OBPM that was more culturally appropriate for youth from the Wikwemikong community. Second, it was expected that the youth who participated in the OALE would demonstrate statistically significant improvements in levels of resilience and well-being. Third, it was expected that the qualitative analysis of the data from the various sources would identify the elements of the OALE that were the most important in leading to resilience and well-being for the youth. The subsequent sub-sections summarize and then integrate the key findings from each phase. Summarizing and integrating the key findings is important because it helps contextualize the Connecting Framework, which is described further in a subsequent section.

Phase 1 Findings: What is a Culturally Relevant OALE?

Phase 1 of the study focused on intentionally developing a culturally appropriate OALE program for the youth in Wikwemikong. The program was developed over the course of a year (July 2008 – June 2009) following a CBPAR/CBPR process. The development process included

structured focus groups, meetings, and workshops. Chapter 3 (Paper #2) describes the process and outcomes of two focus groups held in Wikwemikong that deliberately targeted community members with the cultural expertise necessary to refine the OALE: (1) seniors and Elders from the Amikook Seniors Centre; and (2) mental health workers from the Nadmadwin Mental Health Clinic. Beyond these two research-oriented focus groups, there were three meetings with a Community Research Steering Committee and 17 community meetings and workshops that served to help revise and refine the final 10-day OALE program. It was the collaborative and iterative nature of the process that helped ensure that the final program was culturally relevant and appropriate.

In keeping with the spirit and principles of CBPR, the initial OALE program implemented in 2009 was revised in 2010 and again in 2011 based on community feedback and findings from the research. Appendix F contains an OALE program summary based on the 2011 version of the program. The main difference between the original 2009 and 2011 version of the program was the addition of four additional principles: *Intentional Facilitation, Accessing Resources, Elder Support, and Creating Connections*. The 2011 program was also restructured to simplify the routine and responsibilities of the staff leaders. These were not substantive content changes; thus the original 2009 program remained largely intact in 2011.

Phase 2 Findings: Does the OALE Promote Resilience and Well-being?

Phase 2 of the study was focused primarily on using quantitative methods to evaluate whether there were any changes in resilience and well-being for the youth who participated in the OALE. Chapter 4 (Paper #3) demonstrated a short-term change by comparing mean scores at different time periods on several relevant scales that were compiled into a Health and Well-Being Questionnaire (HWBQ). The HWBQ was administered to each of the youth one day before

(Time 1 = T1), one month after (Time 2 = T2), and one year after (Time 3 = T3) the OALE.

The primary scale used was the 14-item Resilience Scale, [6] and the key finding from the main analysis (repeated measure t-test) was that there was a short-term improvement in resilience.

Due to the limited sample size (46 matched pairs from T1 to T2; 33 matched pairs from T2 to T3), the available analyses for the other well-being scales and time periods were limited.

Nevertheless, trend analysis (comparing means at different time periods) revealed that there were consistent positive trends observed for the six additional well-being scales from T1 (one day before start of OALE) to T2 (one month after completion of OALE). Observed trends for the well-being scales from T2 to T3 (one year after OALE) were inconsistent with two scales showing positive trends (Mental Health, Satisfaction with Life) and three scales showing negative trends (Physical Health, Self-Esteem, Flourishing). One scale (Balance of Emotion) had no change in score from T2 to T3.

There were several attempts to obtain a comparison group in Wikwemikong from within the education system (collecting data while youth in the target age group were at school) and through a summer youth employment program. However, permission was not granted to collect data within the schools, and only nine complete data sets (T1 to T2) were obtained from the youth enrolled in the summer youth employment program. Nevertheless, there was a large difference in the mean changes scores (T1 to T2) for the RS-14 between the OALE intervention group (n=46) and the comparison group (n=9). The mean increase in resilience was 3.39 from T1 to T2 in the OALE intervention group, and there was a mean decrease of 16.05 in the comparison group. This comparison provides further support that participation in the OALE likely had a positive short-term impact on the level of resilience for the youth involved.

Paper #3 (Chapter 4) also presents results of the qualitative analysis from responses to open-ended questions appended to the HWBQ administered one year after completion of the OALE (n=26). The qualitative findings supported the quantitative analysis and helped explain why the positive gains in resilience were not sustained one year after completion of the program. In the intervening year after participating in the OALE, the youth described both positive and negative changes that may have impacted their resilience and well-being such as: other community and school programs (positive); recent fatalities and life stressors (negative); and change in family living situation (both positive and negative). Nevertheless, nearly all of the respondents indicated that the OALE was beneficial, and no respondents regretted participation in the program.

The short-term improvement in resilience from T1 to T2 was also confirmed by the preliminary analysis of 14 participant interviews outlined in Paper #2 (Chapter 3), using principles of analytic induction. [7] The findings from this analysis indicated that the OALE resulted in positive changes in resilience as confirmed by 14 youth respondents in field interviews during the last few days of the OALE. By participating in the OALE, the youth systematically confirmed that four of the five characteristics of resilience [6, 8] were positively developed: self-reliance, meaning, equanimity, and perseverance. The fifth characteristic, existential aloneness, did not have enough evidence (from the interview data) to support or refute whether it was in fact a salient characteristic.

In summary, both the quantitative and qualitative results confirmed that there were short-term improvements in resilience for the youth participants. These results are similar to several other outdoor adventure studies using resilience as an outcome variable in non-Indigenous populations. [9-14] However, the short-term improvements in resilience from participation in the OALE were

inconsistently sustained one year after the experience. Lack of sustainability is likely due to the lack of consistent follow-up and aftercare programming, something that has been identified as an important element for adventure therapy programs. [15, 16]

Phase 3 Findings: How Does the OALE Promote Resilience and Well-being?

Phase 3 of the study used qualitative methods to understand the mechanisms or factors related to any perceived positive changes in resilience and well-being for the youth who participated in the OALE. Chapter 5 (Paper #4) describes the results from this phase. The methodological approach used was described as an expedition ethnography in Chapter 5, since it was focused on observing and understanding the culture and context of the 10-day OALE, rather than the culture of the broader Wikwemikong community. In other words, the ethnography was bounded by the time (10 days); experiences (related to programming and other spontaneous events); and places visited (travel route) during the expedition. Data was collected, transcribed, and analyzed from numerous sources: talking circles, journals, interviews with youth and staff leaders, and focus groups. The analysis process spanned nearly four years and resulted in an evolution of the research question and findings towards a culturally appropriate interpretation of the OALE experience that was informed by community Elders and interpreted through Indigenous ways of knowing. [17-22] The final form of the research question was: How does *connecting* promote *Anishinaabe Bimaadiziwin* for the youth?

Initial analytic categories from the participant interviews and an initial leader focus group were identified through open and axial coding [23] that involved grouping and compiling provisional categories and concepts. These categories were then presented to Wikwemikong OALE leaders and co-investigators for discussion and further analysis. The process of collaborative critical analysis [24] within the Wikwemikong community resulted in the emergence of a sensitizing

concept, [25] which was refined even further through the process of crystallization. [26] Hammersley and Atkinson differentiate a sensitizing concept from a definitive concept, suggesting that a sensitizing concept is more like a germ of an idea that points the researcher in a certain direction. [25] Crystallization is the result of diligent triangulation leading to a clarity of thought in the analysis. [26] Fetterman describes this as “the result of a convergence of similarities that spontaneously strike the ethnographer as relevant or important to the study.” [26, p. 108] Murchison [24] describes this crystallization process as a *research moment* because it provides clarity, leads the research in a different direction, alters the primary objective of the research, or leads to more perceived complexity. The initial sensitizing concepts early in the first two years of the analysis were refined through a process of collaborative crystallization in the final years of the analysis. Understanding these key concepts in ethnographic analysis are particularly important in this thesis since the research question and analysis process evolved and changed substantively over a four-year period.

This process led to a provisional hypothesis [23, 27] and conceptual framework [24] for final analysis. The hypothesis and framework revolved around the central concept of connecting, which led to the revised research question [24] that sought to understand how *connecting* helped promote *Anishinaabe Bimaadiziwin* for the youth. The main finding from this phase was that the OALE helped the youth connect to *self* and *creation* as one small step in their personal journey towards Anishinaabe Bimaadiziwin. It must be noted here that connecting to self and creation was based on data and observations of the youth during the 10-day OALE, and no claims can be made about the sustainability or transferability of the connecting process for the youth after they returned home from the experience. A description of the evolution of the research question and an overview of the main findings related to the connecting concept were presented in Chapter 5

(Paper #4). However, further details on the themes and an elaboration of the interactions within the Connecting Framework are described in a subsequent section below.

The third phase of the research was also a profound reflexive experience for me in my own journey as a researcher [28] and as a citizen learning about Indigenous ways of knowing and seeing and the way in which Indigenous knowledge shapes an entire worldview that is unique and different. My shifting reflexive perspective is also further described in a subsequent section below.

6.2 Integration of Key Findings

The OALE was originally designed as an intervention that would promote resilience and well-being for the youth participants. Through the OALE, the youth did develop short-term increases in resilience through their participation in the experience. There were also some trends from the quantitative data and themes from the qualitative data indicating that there was a broader impact on well-being or holistic health for the youth. However, as summarized above and described in Chapter 5, the main finding from the study was that the OALE helped the youth connect with Anishinaabe Bimaadiziwin (the Good Life). Anishinaabe Bimaadiziwin, or the Good Life, is a more culturally relevant concept to describe resilience and well-being in Wikwemikong. There were four main themes that describe the OALE connecting process as presented in the following phrase: the youth connected with *creation* through *experiences*, and they connected with *self* through *reflection*. Essentially, the process of connecting involved the youth becoming more aware of creation through a variety of outdoor experiences, and then internalizing and reflecting on those experiences so that they became more aware of who they were and who they wanted to be in the created world around them. Wikwemikong Elders suggested that the connecting

process was part of the journey of life for the youth. As they reclaimed their identity as Anishinabek, the youth were waking up (*nsidwaaswok*) to the Good Life. Figure 6-1 portrays the Medicine Wheel with the four main themes in each of the four quadrants; Anishinaabe Bimaadiziwin is reflected in the centre.

The qualitative analysis in Phase 3 represented the most substantive undertaking of the thesis. In order to more fully understand and appreciate the significance of the findings in this phase, the following section on the Connecting Framework provides more detail and synthesis of the OALE experience within the context of the larger CBPR approach of the study. The integration of findings from all three phases also led to several implications, highlighted several limitations, and helped clarify the need for future research.

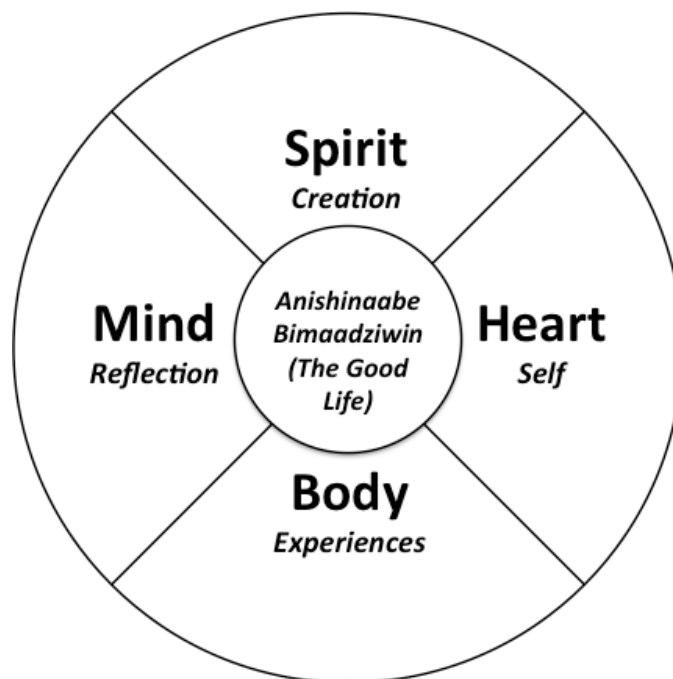


Figure 6-1: Connecting and the Medicine Wheel

The Connecting Framework

The Connecting Framework is a construct that portrays how the youth connected to Anishinaabe Bimaadiziwin through their participation in the OALE. It includes themes and sub-themes which describe the various categories of the connecting processes that occurred for the youth.

Essentially, these sub-themes indicate “how” (experience and reflection) the youth connected and with “what” (creation and self) they connected. Figure 6-2 portrays how these themes may fit in each of the quadrants of the Medicine Wheel, however it is important to note that this graphic does not portray the interaction of the themes.

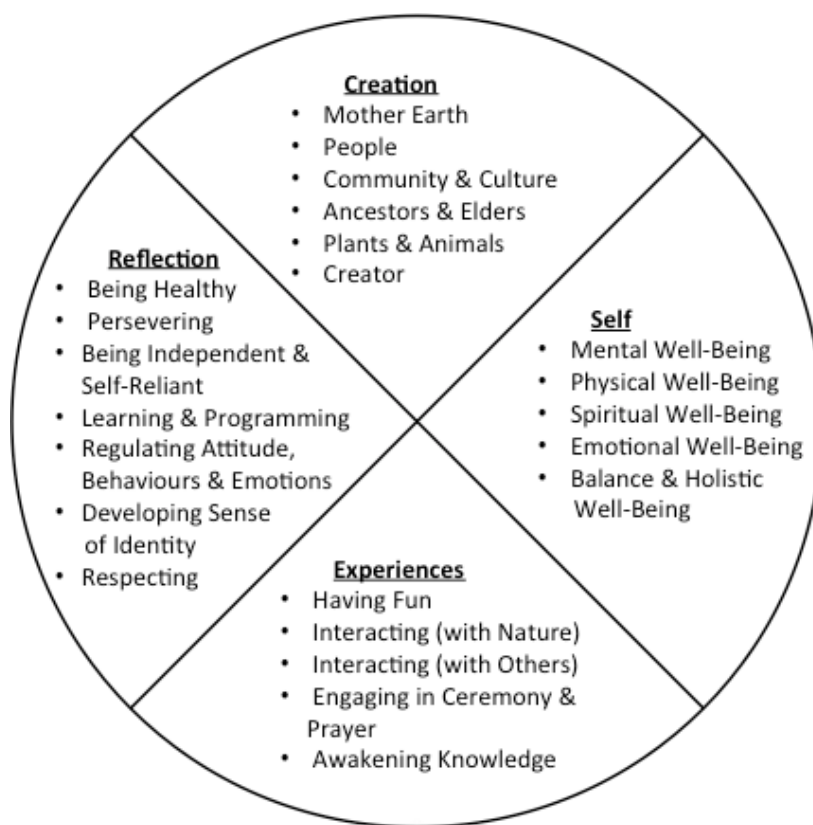


Figure 6-2: Connecting themes in Medicine Wheel framework

To better understand the interactive (connecting) mechanism, it is helpful to review examples of how the themes from Figure 6-2 helped the youth connect with creation and self. Table 6-1 provides some general examples of how the youth connected with creation and self during the

OALE. These examples are not specific results from the data, but simply examples of how the various themes may relate or inter-relate to each other. The phrases in this table represent how a *process* theme (e.g. having fun) was connected to an *object* theme (e.g. people). In other words, the connecting process implies a link between the process and object of connection. Data analysis involved an inductive process over several years that resulted in the broad process and object themes outlined in Figure 6-2 and Table 6-1.

Table 6-1: Examples of connecting with creation and self during the OALE

Connecting with Creation	Connecting with Self
<ul style="list-style-type: none"> • Connecting <i>through</i> having fun <i>with</i> people; • Connecting <i>through</i> ceremony and prayer <i>with</i> the Creator; • Connecting <i>through</i> interacting <i>with</i> plants and animals; • Connecting <i>through</i> interacting <i>with</i> Mother Earth; • Connecting <i>through</i> interacting <i>with</i> community and culture; • Connecting <i>through</i> awakening knowledge <i>with</i> ancestors and Elders; • Connecting <i>through</i> awakening knowledge <i>about</i> community and culture. 	<ul style="list-style-type: none"> • Connecting <i>through</i> being healthy <i>with</i> physical well-being; • Connecting <i>through</i> persevering <i>with</i> mental well-being; • Connecting <i>through</i> self-reliance <i>with</i> mental and emotional well-being; • Connecting <i>through</i> learning and programming <i>with</i> mental well-being; • Connecting <i>through</i> regulating attitude, behaviours, and emotions <i>with</i> emotional well-being; • Connecting <i>through</i> developing a sense of identity <i>with</i> spiritual well-being; • Connecting <i>through</i> respecting <i>with</i> spiritual well-being.

The concept of connecting implies that categories that emerged from the data (comments, phrases, references) were not mutually exclusive, but rather, mutually inclusive. They provided a deeper explanatory story of the entire interconnectedness amongst and across categories to give a richer holistic description of how the OALE impacted the youth. For instance, other variations

of the above example of “connecting with creation *through* interacting *with* community and culture” are as follows:

- connecting with creation through interacting with people;
- connecting with creation through interacting with ancestors and Elders;
- connecting with creation through awakening knowledge about community and culture;
- connecting with creation through engaging in ceremony and prayer with ancestors and Elders;
- connecting with creation through having fun with community and culture.

Thus, the principles of internal homogeneity and external heterogeneity of categories [7] were deemed less important during the analysis phase because the analysis of the data provided a richer description of the connecting process when references were coded to multiple categories.

The Connecting Framework is, by definition, an interconnected construct that emerged from extensive qualitative analysis over several years. Figure 6-3 portrays four different cluster analysis graphs showing different degrees of similarity between coded nodes (themes) from the Connecting Framework. All of the main themes of the Connecting Framework are on the outside of each circle. The important feature displayed in these circle graphs is the sheer number of lines connecting the themes rather than the nature of each connection (i.e. which themes are connected). Each circle graph in this figure portrays coding similarity according to four different levels ($1.0, \geq 0.9, \geq 0.6$, and ≥ 0.3) of a similarity index. The similarity index was determined using Jaccard’s Index which is also known as a Similarity Coefficient, [29, 30] and it was calculated using the NVivo 9 analysis software. Although Jaccard’s Index originated in the field of botany to determine similarities between attributes of plant species, [29] it is a useful statistic

for examining coding similarity in qualitative analysis. Calculations were completed independently for each pair of coded nodes (themes) from the Connecting Framework.

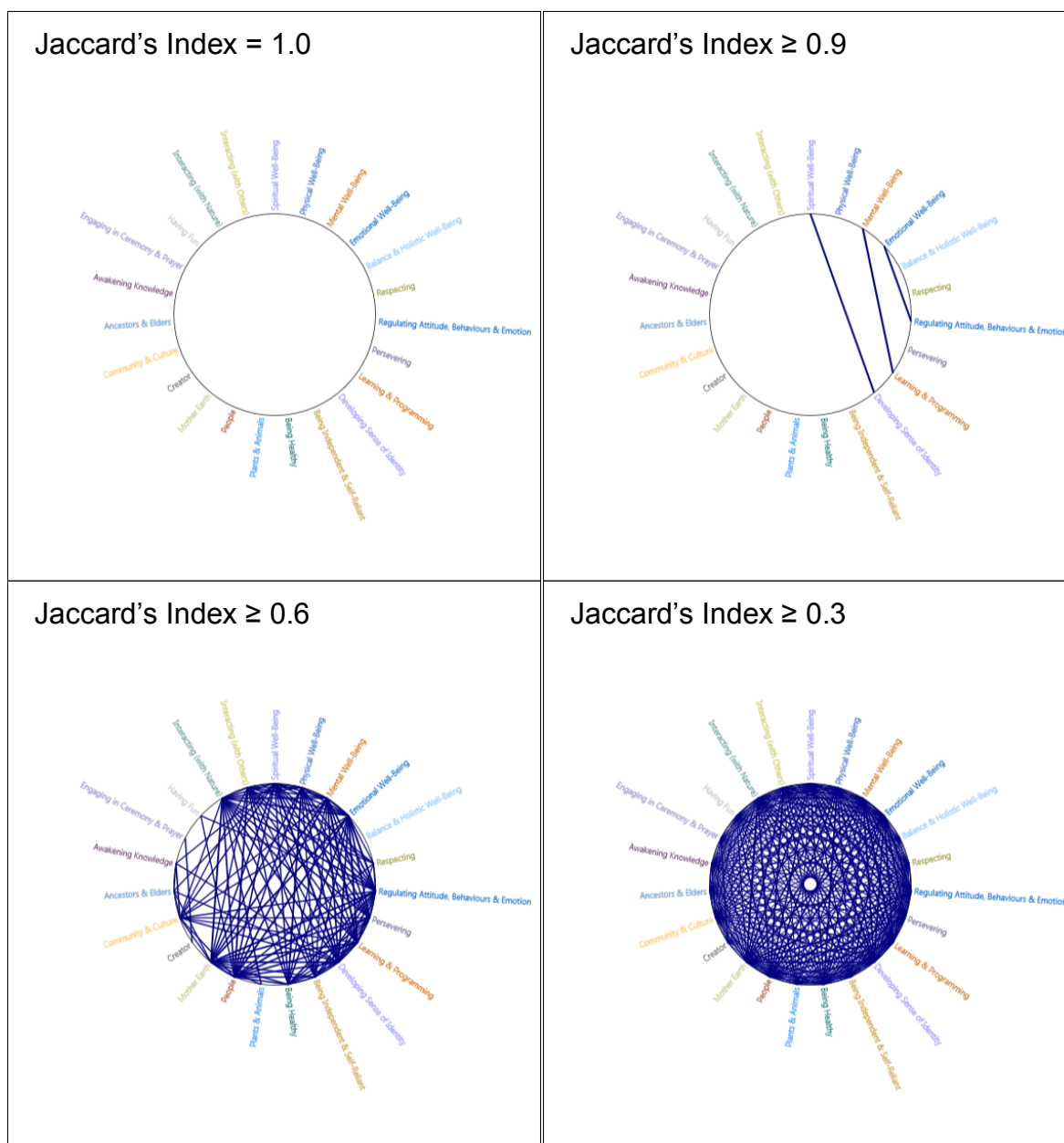


Figure 6-3: Cluster analysis graphs based on coding similarity

Jaccard's Similarity Coefficient is calculated by summing the number of references coded to the same two nodes, divided by the sum of all of the references coded to either node. It can also be defined as the proportion of the magnitude of the intersection compared to the magnitude of the

union of two different sets of data. A similarity index of 1 indicates most similar, and an index of 0 indicates least similar. Thus, the lines in each circle graph represent the pairs of nodes (themes) that met the pre-determined level of the similarity index ($1.0, \geq 0.9, \geq 0.6$, and ≥ 0.3) used to calculate the threshold for each circle graph.

Figure 6-3, and especially the cluster analysis graph representing a Jaccard's Index ≥ 0.3 , could also be viewed metaphorically. The metaphor is simply that the circle portrays how the connecting process reflects an interconnected web of life experiences for each youth. These life experiences occurred during the OALE, and they reflected connecting to elements of Anishinaabe Bimaadiziwin (Good Life). Connecting to the Good Life was a process that extended outward beyond each individual youth to include friends, family, relatives, and the entire community. It also expanded even further to include an awareness and developing relationship with all of nature, or Mother Earth, creation and the Creator. In many ways, the connecting process could simply be described as a process of developing a healthy relationship with self, others, and all of creation. In essence, the youth were realizing their identity as Anishinabek. This connecting process also involved a spiritual process and outcome (spiritual well-being) that highlights the temporal nature of connecting with creation prior to connecting with self.

There is also some apparent overlap between the spiritual well-being associated with connecting with self and the spiritual implications of certain aspects of connecting with creation. For instance, some youth connected with creation by connecting through ceremony and prayer with the Creator. And some of those same youth may have connected with self by developing a sense

of identity with spiritual well-being. What is the difference between the spiritual implications of these two examples?

The spiritual domain of self is differentiated from connecting with creation, by the process and order of change involved. Connecting with creation was through a clearly identified externalizing process such as prayer, a vision, or a ceremony. Connecting to the spiritual well-being domain of self was more of an internalizing process where the youth were contemplating spiritual matters generally, or reflecting and synthesizing several different spiritual experiences into a reflective statement or conclusion. Thus, connecting with creation was more of a sensory experience and seemed to be a first-order change, and connecting with self was a reflective experience and seemed to be more of a second-order change. Although the connecting process was interconnected, there was a relative order to the process whereby the youth seemed to connect with creation immediately during the first few days of the OALE, and then as they accumulated enough experiences with creation, they began to reflect on those experiences and connect with self.

This process could also be described as communing with creation externally and developing a sense of agency internally. [31] The terms communion and agency were defined by Taylor, Segal, and Harper [31] to be inclusive of all of the relationships in an integrated system. From a broad perspective, that integrated system could be defined as the entire created world that was within the scope of experience for each youth during the OALE.

Indigenous Perspectives: Duality and Harmony

The connecting process is best understood from an Indigenous perspective, as described in Chapter 5 (Paper #4). Indigenous scholar James Dumont described the importance of spirit in

terms of the relationship between creation and self: "Just as the spirit is the centre of me and you, so the spirit is at the centre of everything that is of this creation." [20, p. 7] Rheault used the concept of harmony to describe and reconcile the apparent duality in relationships: "Creation is harmony in seeming duality. It is the unity of Being rather than the unity of the intellectual and sensible or of the objective and the subjective. This underlying harmony is what gives meaning to the perceived dualities of life." [21, p. 111] Dumont defined harmony as the central value of the Indigenous worldview since it was "the manner by which the Creator achieved creation." [20, p.17] Thus, the Indigenous concepts of duality and harmony help clarify the spiritual origins that relate connecting with creation and connecting with self.

Numerous Indigenous scholars have described an Indigenous worldview that reflects the connectivity and interconnectivity between people, family, community, nature, and even the supernatural world. [20, 21, 32-34] This interconnected worldview also reflects the comprehensive teachings of the Medicine Wheel that extend beyond the four dimensions of health (physical, mental, emotional, and spiritual) to include other relationships such as the four stages of life (child, youth, adult, elder), the four stages of learning (feeling, observing, reflecting, and doing), the four cardinal directions (east, south, west, and north), the four seasons (spring, summer, fall, and winter), and the four sacred elements (fire, water, wind, and earth). [21, 33] Discussing these other relationships is beyond the scope of this thesis, however they do highlight a comprehensive worldview that posits relations and connectivity as core concepts. Thus, the process of connecting with creation and self during the OALE aptly describes a culturally rooted experience that reflects a unique worldview.

Kirmayer and colleagues explained resilience from an Indigenous perspective, by describing the concept of resilience as metaphor. [35] This metaphoric perspective suggests that resilience is

not static, but a dynamic process that reflects “ongoing responses to new challenges posed by evolving relationships.” [35, p. 85] Resilience as metaphor could also be used to explain the OALE connecting process. In other words, the OALE may have been a dynamic process that presented an opportunity for the youth to reconnect with their land, their traditions, their friends, their community, and their culture (connecting with creation). This, in turn, may have helped the youth reconnect with their identity and holistic well-being in terms of spiritual, emotional, physical, and mental health (connecting with self). This metaphoric perspective further reinforces the concepts of duality and harmony with respect to the evolving, dynamic nature of Indigenous resilience. As the youth encountered challenges and difficulties during the OALE journey, they worked together to overcome the challenges and complete the journey. Thus, the metaphoric journey was both outward (experiences with creation) and inward (reflections about self). Kirmayer et al. concluded the following related to Indigenous perspectives of resilience:

Aboriginal notions of personhood root identity in a person’s connections to the land and environment, which may include recognition of a larger world of human and other-human spirits. Thinking about the person as fundamentally connected to the environment dissolves the opposition between nature and culture. The human predicament then becomes one of working with powerful forces both within and outside the individual. Approached with respect, the natural environment not only provides sustenance, but also sources of soothing, emotion regulation, guidance, and healing. [35, p. 88-89]

By viewing resilience from an Indigenous perspective, [35] one is able to embrace duality: Anishinaabe Bimaadiziwin helps promote resilience, and resilience allows one to appreciate Anishinaabe Bimaadiziwin. Thus, the OALE connecting process could be described as a process of resilience development that occurs concurrently as the youth are connecting to Anishinaabe Bimaadiziwin (Good Life). Connecting or reconnecting may simply be more relevant terms to

describe how the Wikwemikong youth developed resilience through their participation in the OALE.

The Indigenous notions of duality and harmony are important to this research from a number of different perspectives. First, they provide a spiritual foundation to the relationship between connecting with creation and connecting with self. Second, they help explain how the metaphoric challenges of the OALE helped the youth reclaim their identity and sense of well-being. Third, they help explain the challenges associated with balancing various researcher roles and they represent a useful framework for reconciling different methodological approaches and perspectives. For instance, the apparent duality of western science and Indigenous knowledge [22] can be reconciled by actively seeking and honouring the harmony that can be achieved by being aware of the importance of embracing both approaches. In particular, balancing both an insider and outsider view when analyzing the research data was an exercise in duality that spanned multiple years and countless hours. In subsequent sections on reflexivity and study limitations, researcher duality is discussed in further detail.

Outdoor Education, Adventure Therapy and Indigenous Knowledge

Scholars in education, outdoor adventure, and wilderness therapy are beginning to recognize the value of Indigenous knowledge and Indigenous perspectives in non-Indigenous contexts. These perspectives are helpful for further understanding the potential relevance of the Connecting Framework for other cultures and disciplines of study. Barnhardt and Kawagley challenged educational researchers to embrace Indigenous epistemologies as central rather than marginalized approaches. [17] In outdoor education, scholars have recognized the value of Indigenous views and ways of using the land and nature as teacher. [36-41]

In the burgeoning field of adventure therapy or wilderness therapy, there has also been a call to embrace more of an Indigenous view of nature as healer. [42-46] These Indigenous perspectives emerging in the adventure therapy field seem to be gaining broader acceptance, and this is evidenced by a brief survey of the themes and papers in conference proceedings from the 3rd and 4th International Adventure Therapy Conferences [47, 48]. However, nearly all of these cited papers are conceptual or theoretical. There are very few empirical studies published that seek to understand outdoor experiences from the view of Indigenous people themselves.

The voices of dozens of Indigenous participants, from the data in this thesis, provided a unique lens for viewing an outdoor experience from an Indigenous perspective. Thus, the Connecting Framework and process described in this thesis is an empirical source of evidence that reflects an Indigenous process for developing resilience and well-being through an outdoor adventure experience.

6.3 Reflexivity and Positionality

The reflexivity and positionality of researchers is critical to qualitative research, [7, 49] and ethnographic methods in particular. [28, 50, 51] Patton described reflexivity as a process whereby the researcher is “attentive to and conscious of the cultural, political, social, linguistic, and ideological origins of one’s own perspective and voice as well as the voices of those one interviews and those to whom one reports.” [7, p. 65] Positionality is related to reflexivity in that the researcher becomes aware of their position or perspective through the reflexive process. Madison described positionality and then challenged researchers to be “accountable for our research paradigms, our authority, and our moral responsibility relative to representation and interpretations.” [50, p.14] Thus, reflexivity and positionality were important for the entire

thesis, but particularly relevant for the qualitative sections such as the ethnography in Phase 3 (see Chapter 5).

As the principal researcher, it was important that I understood my own beliefs, assumptions, and paradigms, and how these may have influenced my representation and interpretation of the qualitative data and findings in this study. I am a middle-aged male from a European heritage with Christian values and religious beliefs. I am also non-Indigenous, and have lived in Canada my entire life. My family history extends back several generations in Canada, prior to ancestral emigration from Europe (primarily from Wales and Scotland). I have over three decades of experience as an outdoor leader and wilderness traveller, and I am a professor in the Outdoor Adventure Leadership program at Laurentian University in Sudbury, Ontario, Canada. I am aware that my values, beliefs, outdoor experience, and university affiliation influenced all aspects of this study. Being aware of this influence was important because of the immersive short-term nature of the data collection phase and the collaborative long-term nature of the data analysis phase.

Data Collection Phase

I participated in every OALE excursion in 2009 as both a researcher, since I was collecting data, and as a de facto outdoor leader, since I had the resident outdoor experience, knowledge, and skills. One of the characteristics of the OALE intervention was the creation of a social microcosm, [52] since the experience included extended social contact, in relatively close living quarters, in a unique novel environment. I was embedded in this social microcosm, and I therefore had continuous opportunities to observe, engage in conversations and events, participate in talking circles, interview individual participants, and interview the entire travel group in a focus group format. This made me keenly aware that although my primary

responsibility was research and data collection, I was also involved and influential with respect to the implementation of the OALE program. This shifting positionality with respect to my role in the OALE led me to realize that although I was an outsider with respect to the Wikwemikong community, I was often taking on an *insider approach* with respect to my duties as both researcher and leader during the OALE excursions. [7, 49, 51]

Data Analysis Phase

Since the data collection phase transitioned into a data analysis phase that spanned several years, I found that my perspective and understanding of the research data shifted significantly. Early on during analysis, I resisted the temptation to use terms like insider and outsider, or etic and emic, to describe my stance as a researcher, since I was keenly aware of the tensions and controversies between these perspectives. [7, 51] I also realized that, at times, I believed I was taking both an etic and an emic perspective. Indeed, Wolcott describes this dialectic well: “where it once seemed fashionable to insist on being either an emic or etic anthropologist, it now seems questionable how one could conduct ethnographic research without being a bit of both.” [51, p. 142] Perhaps the most important feature of my reflexivity was the slow shift in my understanding of how to view the data more from an Indigenous perspective. The following excerpt from my journal describes one incident that highlights this shift in perspective:

I still remember clearly one of the first co-analysis meetings in Wikwemikong (Aug. 28, 2009) when I arrived with a dozen flipchart pages full of post-it notes, representing provisional categories of coding. Near the conclusion of that meeting one of the mental health workers (OALE leaders) grabbed a felt pen and drew a large circle on a flipchart paper and suggested that you cannot separate the OALE process into categories because they are all connected.... I needed a new way to look at the data since clearly defined categories and tree nodes could only partially explain what was happening for the youth. It was during this process that “Connecting to the Good Life” began to emerge as a more

appropriate way to look at the OALE process and data. (Personal Journal Entry, Dec. 23, 2011)

One of the distinctive features of this entry is that it was written nearly two years after the incident occurred. In other words, during the weeks and months following the collaborative analysis meeting on August 28, 2009, I did not yet realize what I was learning and how my perspective was shifting. At the time, I was frustrated, confused, and uncertain how to proceed with the analysis. However, after the passage of time, numerous follow-up meetings in Wikwemikong, additional reading, more analysis, and an ongoing reflexive awareness of my positionality, I finally realized what was happening, and I was able to articulate it and then write about it. This led me to realize that my position as observer was inextricably linked with my position as learner. This occurred in unique and transformative ways both during the data collection phase and during the ongoing data analysis phase. As I learned more about the Wikwemikong culture, and began to understand more about Indigenous ways of knowing and seeing, I was better able to understand, represent, and interpret what I was observing in the data. Conversely, this shift in positionality also made me keenly aware that my understanding was also limited by my background, beliefs, assumptions, and use of the English language to explain an Anishinaabe concept and experience.

My positionality (outsider vs. insider) and my role (observer vs. learner) further reflected the duality of the Indigenous worldview. Over time, this realization helped me reconcile tensions and apparent contradictions in the data, and I became more sensitized to new ways to view, interpret, and understand. [25] As I analyzed the data, I began to develop a closer relationship with a Wikwemikong Elder, Rita G. Corbiere; she was instrumental in helping me view the OALE more from an Indigenous perspective. Community Elders are considered knowledge

keepers [21, 34] and the source of Indigenous knowledge, [19] so the guidance of Elder Corbiere in interpreting the research data and understanding the OALE connecting process was critical. During our meetings together, she would often refer to the OALE from a spiritual perspective. At a data analysis meeting on December 22, 2010 she began our conversation with these words: “Spiritual upbringing was the way it was with all people.” Corbiere described both spirituality and the OALE connecting process as getting back to basics. Back to basics did not necessarily refer to spiritual ceremonies and beliefs, but simply how to live your life every day. It was like being grounded.

Elder Corbiere’s spirit name is Ginii Kwe (Wild Rose). She received her name when she was very young in a circle dancing around a fire. Someone held up her hand and gave her the name Ginii Kwe. Spirit names describe a person’s life. Elder Corbiere shared with me that roses come from a rose bush with thorns, and that life is not always easy. However, she also indicated that there are also buds and beautiful flowers. This is the full circle of life. It is interesting, important, and relevant that Elder Corbiere shared the story of how she received her name because it related to how she viewed the research data and interpreted how the OALE experience may have impacted the youth. She used the analogy of the bud of a blooming flower to describe the OALE connecting concept:

Many people speak about spirituality. Spirituality is a way of life, and includes all of creation and the Creator. Connecting with creation is like watching a flower bloom. There must be someone making this possible. From a seed comes the stem, followed by leaves and a bud, which with time will become a beautiful flower. The seeds, that is the youth, are nurtured, cared for, and taught life’s teachings. These teachings will help the youth lead a worthwhile and rewarding life. They are never alone. This is Anishinaabe Bimaadiziwin.

The Outdoor Adventure Leadership Experience may only be the beginning, an eye-opener for the youth. Another way of saying it, may be that the hearts of the youth have been opened. The youth experienced an awakening, or an awareness of life and all that the Creator has given us. As one youth stated on his return from the trip, “I believe.” That youth’s belief may have been an awakening. What may have seemed impossible is made possible through positive support and guidance. Being spiritual is having an open heart to the abundance of grace that the Creator offers us, to be adventurous, to be courageous, and to be resilient. (Wikwemikong Elder Rita G. Corbiere, Dec. 22, 2010)

This short excerpt from Elder Corbiere provides a unique cultural perspective with respect to the connecting concept, but it also demonstrates how the teachings I received from an Elder influenced how I came to understand the data and view the emerging themes differently. The OALE helped the youth connect to Anishinaabe Bimaadiziwin. Since the entire research process for this thesis spanned several years, it is not surprising that my views, perspectives, and positionality changed and evolved over time. This required a deeply reflexive process that was embedded throughout all research phases, and then manifested through journaling, ongoing analysis, and writing of papers and articles. In particular, I believe that my positionality, as the principal investigator, shifted more towards an insider perspective [7, 51] over the course of the research process. Perhaps the best example of this shift in positionality is represented by the evolution of the research question in Phase 3 (Chapter 5). As I began to analyze and understand the data more from an insider perspective, I realized that I was not asking the right research question. This process occurred slowly over several years as I began to learn about Indigenous intelligence, Indigenous knowledge, and Indigenous ways for viewing and interpreting the findings.

Over the course of this research experience, it became clear to me that the Anishinaabe people view the world differently. Creswell recommends that researchers understand their own

worldview and “make explicit the larger philosophical ideas they espouse.” [3, p.5] Early in the research process, I was often frustrated with concepts and perspectives that did not fit within my own worldview. However, as I was slowly mentored by Elder Corbiere and others in the Wikwemikong community, I came to a better understanding of the Anishinaabe worldview. Similar to the awakening that occurred for the youth on the OALE, I experienced my own personal awakening over the course of the research process. This reflects the concepts of duality and harmony described in a previous section. Over time, I worked towards harmonizing these dual views of the world.

I have used the terms reflexivity and positionality in this section, however from an Indigenous perspective, I may simply have received teachings from Elder Corbiere and others in the community. These teachings helped me grow as a person and gain the relevant knowledge about the OALE and how it impacted the youth.

6.4 Knowledge Transfer

Community involvement, capacity building, knowledge transfer (KT), and dissemination of results are critical elements of community-based participatory research (CBPR). [53-56] The purpose of the KT strategy in this study was to share the story from the collaborative OALE research project, and it did so by incorporating and honouring community involvement and capacity building. The following sections portray the relevant contextual approaches to KT, and then describe the three main facets of the OALE knowledge transfer implementation strategy used.

Internal and External Approaches

KT in this study involved an internal community-oriented approach and an external dissemination approach. The internal approach included: community meetings to both gather data and share results, employment of a First Nations research assistant and outdoor leaders, facilitating training workshops within the community, and preparation of training materials and manuals. Near the end of the research process, this internal approach also involved sharing and revising the findings with community leaders in Wikwemikong, presentations to the Health Services Committee, and open presentations to the entire Wikwemikong community.

The external approach included presentation of results at regional, national, and international conferences and publications in various journals, including peer-reviewed academic journals. In most cases, the external approach also involved co-presentation and co-authorship. This also reflects the principles of CBPR. [56] Other KT initiatives involving film media and online learning were developed to complement these approaches.

KT in the Indigenous Context

The Canadian Institute of Health Research (CIHR) is committed to KT. Documents supporting ethical research within Indigenous communities also prioritize KT activities highly, suggesting that KT is at least, if not more important than the research upon which it is based. [34, 57, 58] However, to understand KT within the Indigenous worldview, it is necessary to understand the concept and principles of Indigenous knowledge. These concepts and principles have been described at length in earlier sections of this thesis (Chapter 5 and 6). Smylie et al. [22] summarized the process of Indigenous knowledge as circular and cyclical beginning with stories that are translated into knowledge, and then culminating in wisdom that disseminates this

knowledge through stories again, and the cycle continues. This process helped frame the KT strategy in this study.

The KT strategy emerged from three basic questions: *What is the story of the OALE? How do we share the story? With whom do we share the story?* These same questions also reflect the literature and mandate of KT. [22, 59] Youth participants, leaders, community members, and Elders were encouraged to share their stories with respect to the OALE, with the intent of consolidating the knowledge. This meant that at times, the KT process became a reciprocal learning process where preliminary findings were being shared with the community members, and at the same time community members were asking important questions and providing insights that enriched the findings. Thus, the KT process was also inextricably linked to the data analysis process, and together this helps explain why the data analysis phase spanned nearly four years. The KT and analysis process was iterative and ongoing as the findings were shared, refined, revised, and re-shared within the community. The findings from this study were also synthesized into a variety of formats that were deemed accessible, appealing, and appropriate for Wikwemikong leaders and community members.

In the Indigenous context, KT can be defined as the “two-way flow of respectful and relevant information.” [59, p. 4] This is important because effective KT is more than the uni-directional transfer of knowledge from the mainstream research community to Indigenous communities. In their summary report of KT, Ranford and Warry suggested that “the essential challenge of KT is how research can inform health policy and practice and, in the Aboriginal context, how Indigenous knowledge and understandings of health care, prevention and promotion can be used to inform mainstream health care delivery.” [59, p. 5] The OALE intervention was an example of how Indigenous knowledge has been integrated with an outdoor adventure leadership

framework to develop a health promotion practice that is relevant to an Indigenous community. Learnings from this intervention may also inform mainstream health promotion programs in other communities in the future.

Three Facets of Knowledge Transfer

The purpose of the KT strategy was to share the story from the collaborative OALE research project. There were three interrelated facets to the KT Implementation Plan: (1) OALE Resource Revitalization and Capacity Building; (2) Multimedia Resource Development; and (3) Sharing the Story. They will be presented separately in this section of the thesis, however they are interrelated and were implemented concurrently and collaboratively.

The purpose of the first facet was to ensure that there were high quality resources and trained staff to sustain the OALE intervention into the future. This facet involved an ongoing process to consolidate the research findings and translate the learnings into a format that was functional within the community and context. Thus, a program manual was developed to capture the important elements for effective implementation of the OALE. Currently there is a 3rd Edition of the *OALE Program Manual and Facilitator Guide* revised in 2011. [60] Staff training was delivered over a two-week period prior to the implementation of the OALE in 2009 and 2010. The *OALE Program Manual and Facilitator Guide* was used as a resource during this training, and OALE staff were expected to learn and apply key elements from the manual and training while on the 10-day program with the youth. Thus, the training process was intended to build local capacity to deliver the OALE program, and the manual provided a valuable resource that helped ensure the sustainability of the program beyond 2010. Resource revitalization and capacity building is reflective of the cyclical nature of Indigenous knowledge, [22] and it is a fundamental characteristic of effective CBPR. [1]

The second complementary facet of the KT strategy was to create multimedia resources to enhance the story-telling process by linking stories to learnings, so that key elements of the OALE and research findings were accessible and available in an interesting and informative way. This phase involved the creation of a short documentary film, the development of an online training resource, and the use of social media to help OALE participants and staff stay connected after the OALE. In 2010, a short video documentary (12 minutes) was produced. [61] The video was designed to use a story-telling approach that was intended to reflect and reinforce the cyclical nature of Indigenous knowledge and KT development. [22] The video was used for articulating the essence of the program to supplement presentations at meetings, conferences, and workshops, and it was an important community resource for promotion activities to support program sustainability. The OALE was a holistic intervention, and a video documentary was a holistic dissemination medium for capturing multiple perspectives and stories in a unified manner. For instance, the video allowed the following people to share their stories and perspective with respect to the OALE: two youth participants, the Health Services Director in the community, and Wikwemikong Chief Hazel Fox-Recollet. As the principal researcher, I also shared my perspective based on some of the preliminary findings from the data. The video also functioned as a recognition tool for those dedicated to implementing the program (staff), for those participating in the program (youth), and even for the entire Wikwemikong community. The video is available for viewing online at www.OALEvideo.laurentian.ca. Appendix K features more information about the video, including a synopsis and list of credits and acknowledgements for all of those who were involved with the project.

Beyond the video, other multimedia resources were created. A Facebook page was created to maintain connections forged during the OALE. It is available for viewing at:

<https://www.facebook.com/oale.wikwemikong/about>. Several other supplemental documents were created as informational and promotional material (electronic & paper versions) for interested community members and other stakeholders. Appendix F contains an example of one of these documents; it is a short summary of information describing the OALE in an interesting way using lay terms. In partnership with the Canadian Institute of Health Information, the OALE program was also featured in the development of an online training course entitled: Promoting Positive Mental Health in Canada (CPHI). [62] The course is available free-of-charge as a self-study at <https://learning.cihi.ca/users/index.aspx>. The creation of engaging resource materials (video documentary, social media, electronic documents, self-study course, and OALE manual) increased the likelihood of stimulating interest in a variety of contexts. This was particularly important because lack of interest was identified by Ranford and Warry as a barrier to KT at the community level. [59]

Preparing and revising the OALE manual and staff training sessions (Facet 1) and preparing multimedia resources (Facet 2) helped ensure that there were professional resources and a variety of tools available to facilitate opportunities for sharing the story (Facet 3). Sharing the story activities were embedded within the first two facets, but they also extended beyond the OALE youth participants, community leaders, and frontline staff involved in the OALE program. Several PowerPoint presentations were created for use in different types of contexts (community and academic fora). Within the community, these presentations were open to all parents, youth, and members of the community. They were also offered at various locations in the community such as the Nahndawhweh Tchigehgamig Wikwemikong Health Centre, the Waasa Naabin Community Youth Services Centre, the Amikook Seniors Centre, and to other groups such as the Health Services Committee and Chief and Council. The primary purpose of these sessions was

to simply share the story of the OALE with relevant stakeholders and any other interested community members. However, they also served as a mechanism to receive feedback and insight that helped with interpretation of the findings, and suggestions were often received for improving the OALE into the future. Various versions of the PowerPoint presentations were also used by community leaders (collaborators) to share the OALE story at various Indigenous health conferences and symposiums outside the Wikwemikong community.

Community involvement and collaboration has been a hallmark of the CBPR approach in this research, and it was a key element in the implementation of the KT strategy. As previously explained, the three facets of the KT Strategy (Resource Revitalization and Capacity Building, Video Documentary, and Sharing The Story) have been presented separately in this section of the thesis, however they are inter-related and were implemented concurrently and collaboratively.

Perhaps the most critical aspect of the KT Strategy with Wikwemikong was the final presentation of findings within the community that symbolically brought the project to a close. On February 13, 2013, the final findings were presented at an open meeting with the Wikwemikong Health Services Committee and then reported again at a larger community-wide research forum on August 1, 2013. This provided two opportunities for all members of the Wikwemikong community to attend and hear the final project presentation. Although the KT Strategy was successful in sharing the story of the OALE, there were several limitations to this study discussed in the following section.

6.5 Limitations

There were limitations related to each phase of the research, and these were addressed in previous chapters. However it is important to highlight and summarize these limitations here. The following sections describe limitations of the qualitative and quantitative phases separately, and then a final section presents limitations related to the sustainability of change for the youth.

Qualitative Phases

Considering the differences between mainstream approaches to research and knowledge and the Indigenous worldview and approach to knowledge generation, the major limitations of the qualitative phases (Chapter 3 and 5) was related to frameworks, researcher bias, positively worded themes, and limitations of language. The following sections describe each limitation and the relevant steps taken to address or mitigate it.

Frameworks. One of the conceptual models supporting the development of the OALE was the OBPM. [4] Since the OBPM was developed from a non-Indigenous program (Outward Bound), it may not be concordant with the Indigenous worldview and Indigenous knowledge perspectives. However, the OBPM was reviewed carefully by community leaders in Wikwemikong prior to being adopted as a framework for program development. Moreover, the original authors of the OBPM, Walsh & Golins, described the “ten-group” as part of the *prescribed social environment*, one of the key elements of the framework. They described the origins of this element this way: “The ‘ten-group’ is a concept for an independent peer group of anywhere from seven to fifteen who have a common objective. The ‘ten-group’ is the latter day version of the old hunting group that hunted for the band.” [4, p. 5] From this description, it appears that Walsh and Golins were somewhat influenced by Indigenous perspectives, since the characteristics of a traditional Indigenous hunting group were important elements of the OBPM.

Thus, it appears that this limitation related to the use of the OBPM was somewhat mitigated by Indigenous design features, and it's a priori acceptance within Wikwemikong.

Researcher bias. Since I am a non-Indigenous researcher interacting with an Indigenous population, this may indicate the potential for researcher bias that stems from my lack of knowledge, understanding, and capacity to analyze and interpret results within an Indigenous context. To address this, the qualitative approach used appropriate methodologies such as talking circles, [63-65] Indigenous coding, [7] and principles of critical ethnography [66] in order to continually challenge value-laden assumptions and seek to profile knowledge and insights that may not have been immediately obvious from a Eurocentric perspective.

I was also mentored and received teachings from Elder Corbiere, and these teachings helped me better understand what was happening for the youth during their OALE experience. In fact, teachings from Elders are one of the primary ways that learning and growth occur in Anishinaabe culture. These teachings allowed me to move outside of my worldview (or bias), and be open to an alternate worldview that allowed me to observe and better understand the holistic interconnected notions of health and well-being. To further minimize the impact of researcher bias, I also ensured that I used a reflexive [28] approach throughout the study so that I was aware of my positionality; [50] this mitigated some of the potential for bias in analyzing the results. Further details regarding this reflexivity and positionality were described in an earlier section in this chapter.

Since most of the detailed analytic work was completed by me, a non-Indigenous person, it could be argued that I may not have had the cultural capacity to understand the Connecting Framework well enough to analyze the data effectively, describe the nuances in the findings, and then

articulate a theory that represents what was really happening for the youth during the OALE. Cultural capacity is a broad term that refers to the historical knowledge, experience with traditions, interaction within the community, and sensitivity to spiritual significance. However, the teachings I received from Elder Corbiere, the use of appropriate methodologies, and the reflexivity on my part helped mitigate the perceived lack of my cultural capacity. It is also important to note that the analysis of the qualitative data spanned nearly four years, and there were substantive changes in the interpretation of analysis and findings that emerged from an evolution of the research question. This occurred concurrently with an evolution in my comprehension of the data, from a duality perspective, that assisted with my cultural capacity to analyze the data differently. This provides implicit evidence of researcher reflexivity, since I realized that the original research question was not as culturally relevant as the final revised research question.

There is also a potential benefit related to the fact that I was non-Indigenous from outside the community. The literature describes the importance of having an outsider or etic perspective in CBPR and qualitative research, [7, 25, 67, 68] because it provides a unique perspective that may highlight important elements in the data that may otherwise remain hidden or overlooked by a researcher with an emic or insider perspective. For instance, Hammersley and Atkinson describe the importance of maintaining intellectual distance and strenuously avoiding the feeling of being at home in the field because this distance creates the space where the analytic work of the ethnographer gets done. [25] As an outsider, I may have been more inquisitive than an insider about simple acts or events that occurred during the OALE. These same acts and events may have seemed natural and been overlooked by an insider who was more familiar with the cultural context and less able to distinguish the relevance of something that was deemed commonplace.

Another way that this outsider view may have been beneficial is through the translation process, with Elder Coribiere, when we were trying to identify Ojibway words to help better understand the data. This is explained further in a subsequent section on the “Limitation of Language.”

Positively worded themes. The Connecting Framework and themes that emerged from this analysis were positively worded, however not all of the comments from the data related to each coded category in a positive way. In other words, there were a few comments suggesting the OALE process resulted in negative feelings, attitudes, and perspectives for some youth. Initially in the data analysis process, these were coded into negatively worded categories. This could lead to the assumption that the experience may have been detrimental or "disconnecting" for these youth. However, when examining all of the data (i.e. the entire journal) for a particular youth, there was no evidence that the OALE was negative for any of the youth involved. Often a negative journal entry early in the OALE program contrasted with a positive journal entry a few days later, and this actually provided additional evidence that a beneficial change process was occurring. In essence, this is another example of the concept of duality where the youth needed to experience negativity and positivity in order to connect with resiliency and well-being and become aware of the Good Life.

Having positively worded themes also reflects the Indigenous worldview that looks at strengths and gifts as opposed to deficits and dysfunction. A strengths-based approach is also an important CBPR principle. [2]

Finally, community leaders were unable to identify a single youth from the sample that regretted participating in the OALE, and no youth self-identified that the OALE was anything but a

positive experience overall. Nevertheless, since data was not collected from all youth, it was not possible to conclude definitively that the experience was positive for all youth.

Limitations of language. The use of the English language to develop, implement, and evaluate the program, may have restricted the learning, change, and understanding from the data that could have been realized if the entire experience was in the native language (Ojibway). For instance, during the analysis phase, Elder Corbiere was asked to identify an Ojibway word to describe the connecting process that was occurring for the youth during the OALE. There was no direct translation for this word, so she offered the concept of Anishinaabe Bimaadiziwin as a more appropriate description for what was occurring. Although this may highlight the limitation of using the English language in this study, the translation process could also be viewed as a strength in the analytic approach, and further translation of other key terms and concepts may have yielded even more insights. As described earlier in this chapter and in Chapter 5, the insight related to recognizing Anishinaabe Bimaadiziwin (Good Life) as a sensitizing concept [25] represented a breakthrough in the analysis process. Thus, although language may have been a limitation, the act of translation between English and Ojibway may have stimulated a cognitive process that produced additional insights that may not have been realized in a singular approach to analyzing the data in either language alone.

Quantitative Phase

There were several limitations to the quantitative phase of the study Chapter 4 (Paper# 3). Most of these limitations were related to sample and scale selection.

Sample-related challenges. There were several challenges related to drawing inferences for a relatively small population of youth ages 12-18 in Wikwemikong (N=450), from a relatively

small sample of youth who completed the OALE and provided complete data sets available for analysis (n=59). This challenge was compounded by additional limitations related to low response rates from the comparison group (n=9), lack of randomization between groups, and potential selection bias since the youth were recruited through promotional material and referral. Despite these limitations, it was remarkable that nearly 60 youth from one First Nation community participated and provided data that was available for analysis in the quantitative phase of the study. Most Indigenous health data related to children and youth in Canada is aggregated at a national level [69]; it is very difficult to find relevant data from individual Indigenous communities across the country. Most health-related studies that collect data from Indigenous communities are national in scope, and relevant information is not available for individual communities due to confidentiality and data suppression policies. This study not only provided disaggregated data, it targeted the collection of information within one First Nations community, analyzed it with community experts, and then provided health outcomes for the youth from that same community.

Use of non-Indigenous scales. There was another limitation related to the quantitative phase of the study. This related to the development and use of the Health and Well-Being Questionnaire (HWBQ) using non-Indigenous scales or measures. The HWBQ was a compilation of seven established scales to reflect the four dimensions of holistic health from the Medicine Wheel Framework (physical, mental, emotional, and spiritual). Each of the scales included in the HWBQ was developed from a non-Indigenous context, since the research team was unable to source relevant scales developed for an Indigenous youth population. This meant that the OALE was evaluated using scales that were not necessarily relevant for the First Nations youth

population in Wikwemikong. Nevertheless, these scales performed well in this study (see Table 4-2).

The lack of relevant Indigenous measures of health and well-being resulted in a discussion with Wikwemikong leaders about this gap and need within the community. This led to a subsequent collaborative research initiative between Laurentian University and Wikwemikong to develop the Aboriginal Children's Health and Well-Being Measure (ACHWM) for use in the community. [70] The evolution of the OALE study, and then the subsequent development of the ACHWM is also a good example of how CBPR approaches can be so effective. The collaborative and iterative nature of a CBPR approach means that study limitations can translate into new projects in an evolving program of research that is designed to address community needs.

Sustainability of Change

The OALE was designed as a short-term intervention, so the lack of sustainability of resilience one year after the OALE is more of a finding than a limitation. Nevertheless, it is important to acknowledge the lack of sustainability as a limitation since it is linked to the lack of follow-up and aftercare, and this is something that has been identified as a priority in the literature. [15, 16] The OALE program design did not include any intentionally designed follow-up process to help the youth continue to maintain their resilience and foster a positive approach in their life journey towards the Good Life. The youth who participated in the OALE completed an intense 10-day experience, but there was no formally established continuation of the program after the summer experience was complete. Although the youth experienced increases in resilience that can be attributed to participation in the OALE, the improvements were not sustained one year following completion of the program.

Community Leaders at the Waasa Naabin Community Youth Services Centre invited the OALE youth to participate in other relevant events and programs throughout the year following the OALE, but attendance at these events was relatively low and inconsistent. It is likely that the main challenge of sustaining the improvements in resilience related to jurisdictional barriers. The Youth Services Centre was responsible for managing and implementing the OALE during the summer, but after the summer the youth returned to school. Involvement in school and other education-related initiatives seemed to make it very difficult for the Youth Services Centre to attract youth for programs developed at the Youth Centre. In Wikwemikong, attendance at school is expected, and attendance at Youth Centre events is optional. There is a possibility that if the Youth Services Centre had offered an integrated OALE program that extended beyond the summer 10-day experience, then this may have prolonged the effects of resilience, helping the youth cope with life stressors such as family fatalities, and changes in living situation. Although follow-up is a limitation, it also presents several opportunities for future program development, collaborative efforts across service sectors, and research.

Elder Corbiere reflected on the lack of sustainability of change, and she was less concerned about this since the youth had *blood memory*. Blood memory bridges time periods where results from the OALE may not have seemed sustainable. Rheault describes blood memory as spirit memory since it is eternal and beyond the constraints of place and time. [21] Blood memory is how traditional knowledge, through the experiences of ancestors, is passed on from generation to generation. [21] From this perspective, the OALE may have helped the youth use their blood memory to connect with their ancestral roots and identity as Anishinabek. This also suggests that the youths' blood memory would continue to flow and help ensure that the impact of their OALE experience would continue to be impactful and not forgotten for years and generations

beyond the experience. Thus, blood memory is an important concept that also helps explain resilience from an Indigenous perspective. It is also important to note that the Resilience Scale (RS-14) used in this study did not have the capacity to assess blood memory which may also help explain why resilience, using this particular scale, did not seem to be sustainable.

6.6 Future Research

The OALE study and findings revealed numerous opportunities for future research. These opportunities are related to addressing some of the study limitations, empirically evaluating the Connecting Framework, and expanding or modifying the OALE for use as an intervention or health promotion strategy in other populations within the community.

The development of an Aboriginal self-report measure of health for children and youth is critical, and that work has begun. [70] Future researchers could also explore whether the OALE program and outcomes would be generalizable to other Indigenous populations, or whether there are significant process or outcome similarities and differences in programs developed in different Indigenous communities in Canada. There is also a need to complete a retrospective study, to understand reflexive perspectives of the youth as they reflect on their OALE experience and how it may have impacted their lives 5 or 10 years after completing the program.

It is important to empirically validate the Connecting Framework in different cultural contexts. One way to do this would be to develop, implement, and evaluate specific process mechanisms that reinforce the connecting process. For instance, the process of connecting with creation could be enhanced with specific programming elements and experiences that would reinforce this connection. Similarly, developing specific reflective experiences that would reinforce this inward connection could enhance the process of connecting with self. These process

mechanisms could be explored further in future studies in both Indigenous and non-Indigenous populations. There also seemed to be a temporal nature to the change process for the youth. Wikwemikong Elders used the term *nsidwaaswok* to represent the process of awakening or waking up for the youth when they were immersed in the connecting process of the OALE. There is evidence in the data from this study that *nsidwaaswok* (waking up) may have occurred early in the experience (Day 2, 3, or 4) for many youth. Hence, exploring when the change process occurred is an important variable to examine in future studies.

The 14-Item Resilience Scale performed well in this study, [6] and it is recommended to use it in other outdoor-related research projects in both Indigenous and non-Indigenous contexts. Future studies of the OALE in Wikwemikong could pool study responses (assuming the same measurement instrument is used) which would increase study power and allow for examination of other holistic factors of health beyond resilience such as: mental health and psychological well-being, physical health, positive emotion, spiritual and cultural values, community-mindedness, and social support.

Finally, using a CBPR approach, the OALE program could be modified, or a new program developed, to incorporate more intentional follow-up or aftercare. Similarly, a CBPR approach could also be used to develop a new program for use in other clinical or at-risk populations in other sectors in Wikwemikong such as mental health, substance abuse, and justice (diversion programs). This would require the intentional use of adventure therapy frameworks and models of practice. [71] Wikwemikong leaders are currently considering this as a strategic priority in the community.

6.7 Conclusion

The 10-day OALE is a culturally appropriate program that was intentionally designed for Wikwemikong youth ages 12-18 years. The main findings from this study were that the OALE helped the youth: (1) become more resilient in the short-term, and (2) become more aware of Anishinaabe Bimaadiziwin (the Good Life) by providing opportunities for connecting with creation and self through a variety of experiences and reflections that were unique for each youth. The program is also well established in the community, and it has flourished and expanded since the pilot program in 2008 and the official launch of the program in 2009. Figure 6-4 portrays graphically how participation in the OALE program has increased and expanded from 2008-2013. The findings from this study were significant and relevant for Wikwemikong, and the expansion of the program over the past six years provides evidence of sustainability. However, community Elders cautioned that the magnitude of the positive change for the youth was relatively small, and it should not be interpreted as a substantive life-changing event. Beyond the main findings, there were other benefits and concerns related to the OALE that are important to note.

The direct benefits of individual participation in the program likely extended beyond developing resilience and awareness of the Good Life. Trained facilitators within the community helped the youth enhance their outdoor travel and living skills, and introduced them to traditional cultural practices. Thus, the OALE helped the youth explore their cultural identity and cultivate their leadership capacity in a wilderness context. Indirect benefits may also have accrued for the community of Wikwemikong since the program was designed to train youth as leaders who may make a positive difference in their community by using their leadership abilities in diverse ways at school, in sport and recreation, in other youth programs, or through other programs that may

be either initiated by the community or by the youth themselves. Although these other potential benefits were not measured directly as variables in the study, the youth, parents, and other community members identified them anecdotally during meetings and at presentations in the months and years since the program was initiated. Finally, there were other indirect benefits related to the additional health-related data that was generated for one sector of the community (youth ages 12-18), and this led to the development of a new health measure for use in the community. [70]

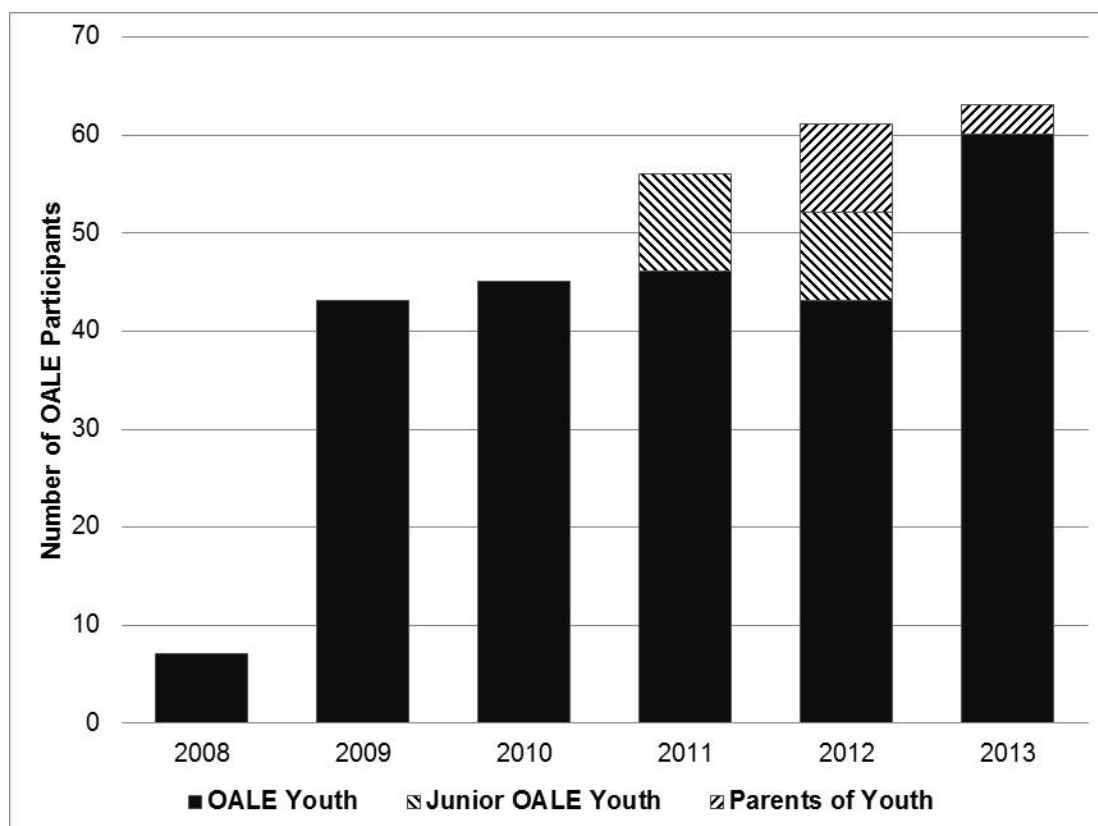


Figure 6-4: OALE participation and expansion over six years (2008-2013)

Despite these other potential benefits, community leaders in Wikwemikong also identified two main concerns about the OALE program in recent years. The first major concern was related to issues of risk management and safety of participants. The second major concern related to program fidelity. [73] Fidelity simply refers to whether the OALE program was being delivered

or implemented as it was originally designed or intended to be implemented. In 2012, the Brighter Futures Manager and Health Services Director in Wikwemikong commissioned a comprehensive five-year evaluation of the OALE program (2008-2012) to address these concerns.

This evaluation was completed at the end of the 2012 season and resulted in a confidential report for the community. [72] The purpose of the evaluation was to address all aspects of the OALE, including but not limited to: program design and delivery, staff training and effectiveness, and risk management and safety. The evaluation followed principles of realist evaluation. [74, 75] Data was collected through field observations, interviews, meetings, and from archival documents including research reports and published papers about the program.

The final evaluation report contained over 50 key findings and recommendations; however most of them were addressed under three broad recommendations that reflect the three main sections of the report: (1) Revise the *OALE Program Manual and Facilitator Guide* (document) and subsequent staff (facilitator) training system; (2) Develop a comprehensive OALE Program Policy and Risk Management Plan (document) and subsequent staff (facilitator) training; and (3) Create an ad-hoc committee reporting to Chief and Council with a mandate to develop a five-year strategic plan for governance and expansion of the OALE program into the future. Implementing recommendations is the responsibility of community leaders in Wikwemikong, and this work has begun.

Significance and Implications of the OALE Study

The OALE study was substantively significant because it used a comprehensive research design to address an important issue within a rapidly growing at-risk population in one First Nations

community in Canada. It was also substantively significant because the result of this work, the OALE, became well established and sustainable within the community (see Figure 6-3). The Wikwemikong community functions as a collective society, where all members contribute to the well-being of the community. This community is also intimately connected with the natural world since living the traditional Anishinaabe life involves a deep respect, reliance, and relationship with all creation including both living and non-living entities. [20, 21, 33] Many community members also envision well-being using the framework of the Medicine Wheel – which shows all facets of health as holistic, related and interconnected. [33, 76, 77] Because of this, deficits in one component of well-being for one component of the community, has the potential to detract from all aspects of well-being for the entire community. In other words, deficits in youth mental health likely have a much broader impact on the holistic health of the entire community. This is why the Wikwemikong community [78] and the academic and policy-related literature, [79-85] have focused on youth and identified mental health and suicide prevention as key priorities for Indigenous health. The OALE was designed to address these priorities for one First Nations community in Canada.

The OALE intervention was effective in promoting resilience over the short-term among youth in the Wikwemikong community. It was also effective for helping the youth become more aware of their culture and traditional way of life (Anishinaabe Bimaadiziwin). The community is committed to implementing the program into the future, and funding to support the continuation of the OALE was included in the Wikwemikong Health Services five-year Strategic Plan and Budget. The OALE, or similar type outdoor interventions, may also be effective for clinical and at-risk populations in Wikwemikong, and for other First Nations communities across Ontario and

beyond. Moreover, the Connecting Framework may be a useful model for the design of future programs or studies in both Indigenous and non-Indigenous contexts and populations.

Currently the median age of First Nations people in Canada is 26 years compared to 41 in the non-Aboriginal population. [86] Aboriginal children and youth are one of the fastest growing sectors of Canadian society, [86] and because we recognize that our children and youth are our future, the indicators of mental health challenges in this population are cause for concern. [80, 87] Research results from the OALE program within the Wikwemikong community provided evidence of an effective short-term intervention to address this challenge. These findings lay the groundwork for future research and program development.

This study makes several significant contributions to the literature. First, it provides evidence for the efficacy of culturally appropriate outdoor programming as a viable health promotion option for Indigenous youth. Second, it portrays a unique Indigenous perspective on the mechanism of change with respect to the way in which an outdoor program helps youth connect to who they are as a person and how they relate to the entire created world around them. Thus, the Connecting Framework described in this thesis may be useful for designing other outdoor programs for other Indigenous communities. It may also be useful for designing outdoor programs for populations in non-Indigenous contexts.

Final Voices

The river is like a leader.
It has a constant flow.
The map helped on this one, it showed us which way to go.
Paddling through the river, made me think a lot.
Paddling through the wind, the rain, the cold and the hot.
Realizing there's so much to life,
So much to see, and so much to do.
Through the good and the bad.
Be strong and make it through.
Be yourself and be proud of who you are.
Be a leader like the river.
Cause in life, it'll take you far.
(OALE participant, Age 15, Journal entry, July 2009, Day 7, Trip 2)

The Outward Bound process offers one of the most flexible and multifaceted paradigms existent in education and mental health. It has the ability to involve every aspect of the participant, to be truly holistic, to cut quickly to the heart of the problems, and to do all this in a context – wilderness – that is simultaneously pragmatic and sublime.
(Stephen Bacon, 1983 [88, p.1])

We are all related to one another because we have the same mother – that's worldwide – it is a belief amongst Indigenous people of the world as well as here in North America. All of creation, then, is our family. Creation is the great *extended family* of which we, as human beings, are a part.
(James Dumont, 2006 [20, p.13])

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Appendix A: Paper #5 - Frameworks for Adventure: The Outward Bound Process Model and the Medicine Wheel

Stephen D. Ritchie, Lawrence Enosse, Jesse Peltier

Reprinted with Permission:

Ritchie SD, Enosse L, Peltier J. Frameworks for adventure: The Outward Bound process and the Medicine Wheel. *Pathways: The Ontario Journal of Outdoor Education* 2013; **25(3)**: 12-4

Context for the article:

The article in this appendix is the fifth integrated article that reports on the two main theoretical frameworks used in this study: (1) the Medicine Wheel and (2) the Outward Bound Process Model.

Over the past four summers, more than 170 youth ages 12-18 from Wikwemikong Unceded Indian Reserve participated in a 10- day Outdoor Adventure Leadership Experience (OALE). Since there are approximately 450 youth (12-18 years) living on the reserve, the program participation rates each year were remarkable. The OALE is well established in the community. Wikwemikong is one of the largest First Nations in Ontario, with a population of 2592 living on a reserve encompassing 413 kilometres in the Georgian Bay area of Lake Huron. The people of Wikwemikong self-identify as Anishinaabe, although they trace their citizenship to the Three Fires Confederacy, which was an alliance between the Ojibway, Odawa, and Pottawatomi nations (for an overview see <http://www.wikwemikong.ca>).

The OALE was intentionally designed to promote resilience and well-being for the youth. The program involved a wilderness canoe expedition homeward in the traditional territory of Wikwemikong. The travel route followed the French River, continued northwest along the north shore of Lake Huron, and then crossed the North Channel to Wikwemikong village on Manitoulin Island. The youth and staff travelled together in small groups (~5 canoes / ~10 people) for the entire 10-day experience. They encountered numerous challenges along the way including rapids, portages, route-finding, bad weather, and large waves on the open waters of Georgian Bay. Programming included day leadership responsibilities, discussion themes, evening talking circles, Elder teachings, traditional ceremonies, and a half day reflective solo experience in a sacred area of the route. One of the highlights of the experience was the homecoming celebration when each travel group arrived at Wikwemikong on the last day. The youth were welcomed by a large group of friends, family, and community members. They were

then recognized individually for their accomplishment and honoured with a community feast. Many of the youth described the OALE as a positive transformational experience.

The OALE was developed collaboratively by community leaders in Wikwemikong and researchers from Laurentian University. Program development was guided by two theoretical frameworks: (1) The Outward Bound Process Model, and (2) The Medicine Wheel. Outdoor programs are as diverse as the people and organizations that develop them; they often have unique characteristics, policies, practices and traditions. However, it is often helpful to examine the theoretical frameworks or philosophies upon which the programs are based. In fact, it is likely that an understanding of the theoretical foundations of a program is more interesting and useful to other outdoor educators, than the details of the program itself. The purpose of this paper is to briefly present the two frameworks that guided the development of the OALE in Wikwemikong.

The Outward Bound Process Model

The Outward Bound Process Model (OBPM) was first presented by Victor Walsh and Gerald Golins in 1976. [1] These authors described the principles of the process governing the delivery of Outward Bound (OB) courses in the USA at the time. They clearly delineated the difference between an OB *program* from the *process*. They were not trying to describe the details of a typical OB course, but were trying to present the OB process as a philosophy or theory governing these types of courses. The OBPM presents “the structures, components, and conditions whose presence and interaction ensure that an experience is educative along the lines of Outward Bound.” [1, p ii] There are eight interactive process elements that represent the OBPM:

1. A motivated and ready learner, is placed into...

2. prescribed physical environments, and into...
3. prescribed social environments, then given a...
4. characteristic set of problem-solving tasks, creating a...
5. state of adaptive dissonance, leading to...
6. mastery or competence, leading to...
7. reorganization of the meaning and direction of the experience.
8. Outcome: The learner continues to be oriented toward living and learning. [1]

Over the years, scholars have examined and critiqued the OBPM. [2-7] Early on, Nold [3] suggested that the model should be circular and focus more on transference, and later Bacon [2, 8] offered a very influential perspective on the evolution of OB towards a metaphoric model of processing. Sibthorp [4] examined the OBPM empirically and confirmed the importance of the initial readiness of the learner (motives and expectations) with characteristics of the experience, but did not demonstrate a significant link between initial readiness and the outcome variable of self-efficacy. McKenzie [5] also completed an empirical study and proposed a revised non-linear version of the model that included three additional components: service, instructors, and reflection. Despite these critiques however, the OBPM is still well established in the literature in its original form. Sibthorp stated that “it is difficult to find a text on adventure-based programs without the Walsh and Golins citation.” [4, p. 81] Recently, Gass, Gillis and Russell endorsed the OBPM, using it as the theoretical foundation for adventure therapy. [9] They summarized 30 empirically grounded factors that strengthened the OBPM as a theoretical framework. Most of these factors also apply to outdoor education:

The Outward Bound process offers one of the most flexible and multifaceted paradigms existent in education and mental health. It has the ability to involve every aspect of the

participant, to be truly holistic, to cut quickly to the heart of the problems, and to do all this in a context – wilderness – that is simultaneously pragmatic and sublime. [8, p. 1]

The Medicine Wheel

The sacred circle, circle of life, wheel of life, or Medicine Wheel (MW) are all related terms that represent the preferred frameworks of health in most Aboriginal communities across Canada. [10] The MW also represents and encompasses an entire Indigenous worldview. [11, 12] In Wikwemikong, the MW is the preferred framework to guide the development of mental health promotion programs such as the OALE. It encompasses the concept of well-being which includes the four dimensions of health: body or physical, mind or mental, heart or emotional, and spirit or spiritual. It is also relational or communal and includes self, others, and nature (or creation). The Medicine Wheel reflects the life of an individual that is integrated within a family, community, and culture. [11, 13, 14] The MW does not separate mental health from other aspects of health and includes a more comprehensive and interconnected perspective of a state of balance and harmony within the individual as well as within the family, the community, and the larger environment. [15-18] There are different versions of the MW depending on the traditions and teachings of a particular community. Figure A-1 illustrates one simple version of the Medicine Wheel used in Wikwemikong:

The wheel [MW] conceptually divides what is interconnected in Creation. It allows a person the ability to grasp the utter complexity of Creation in small, manageable pieces so that they can begin to reflect on various aspects, and then move onto the next. [19, p. 147]

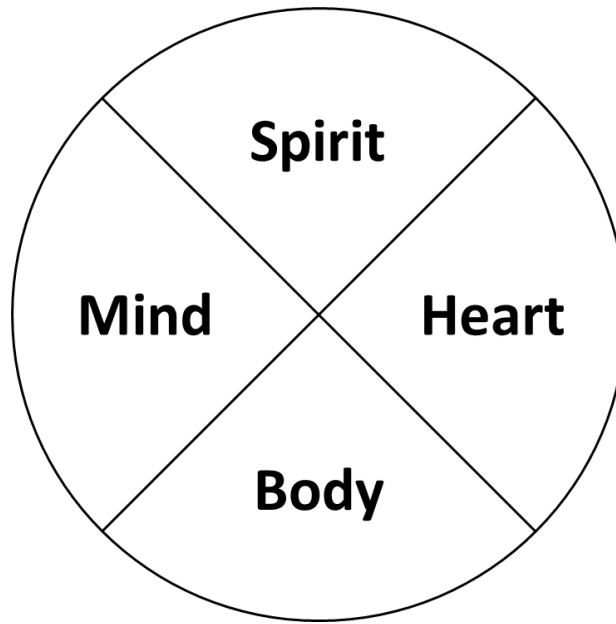


Figure A-1: The Medicine Wheel Framework

Conclusion

Both the OBPM and the MW were important frameworks for the development of the OALE in Wikwemikong. It is clear that the OBPM has stood the test of time; it is simple yet comprehensive, and theoretical yet practical. The MW is a culturally relevant framework in Wikwemikong, yet it was remarkably versatile and seemed to implicitly reflect the OALE experience for the youth involved. The MW also seemed to complement the interactive elements of the OBPM. Research findings from the OALE [20] confirmed the importance of the MW since it symbolized the path to Anishinaabe Bimaadiziwin (the Good Life). There are many theories, philosophies, and frameworks in the outdoor literature. It is less important to select the perfect theory for a particular outdoor program. It is far more important to ensure that there simply is a theoretical framework that forms a solid foundation supporting a particular program. This will bring increasing credibility to the field of outdoor education.

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Appendix B: Research Ethics Approval Certificates

Manitoulin Anishinaabek Research Review Committee

c/o Noojmowin Teg Health Centre

Attention: Lenore Mayers

Postal Bag 2002, Hwy 540

Little Current, ON P0P 1K0

Tel: (705) 368-2182 ext. 201

Fax: (705) 368-2229

lenore.mayers@noojmowin-teg.ca

This is to certify that AMENDMENTS to the research proposal entitled Developing Aboriginal Youth Resilience through Outdoor Adventure submitted by Stephen Ritchie on February 11, 2010 has passed an ethics review by a subcommittee of the Manitoulin Anishinaabek Research Review Committee (MARRC).

Project Start Date: February 2010

Project Finish Date: September 2011

Conditions: None

Please note:

This MARRC Ethics Certificate does not authorize a project to proceed. ***Projects must be approved by the respective First Nation community and/or organization.*** Although the MARRC can provide an ethics review as a service to the First Nation communities and Aboriginal organizations on Manitoulin Island, **we are not responsible for the actions of the researchers during the research project.**

This certificate covers only the documents submitted, in the language in which they have been submitted. During the course of research, no deviations from, or changes to the protocol, recruitment or the consent process and form may be initiated without prior written clearance from the MARRC. If you wish to modify your research project please submit a letter outlining the proposed changes to the MARRC Secretary.

Within 6 months of completion of a research project, a report on the completed research project should be submitted to the MARRC secretary. The report shall include information on the following: the number of research participants, whether any problems were encountered during the course of the research as well as the main findings. Published articles would also be appreciated so that the MARRC can build a virtual resource library.

Congratulations and best of luck with your research!

Sincerely,



Lorrilee McGregor, Chairperson
MARRC

Date: March 11, 2010

April 20 2009

Stephen Ritchie
Human Kinetics – Ph.D. Student at the School of Rural and Northern Health
Laurentian University

This is to inform you that the study entitled *Developing Aboriginal Youth Resilience and Well-Being Through Outdoor Adventure Leadership Experience* (2009-03-03), presented by Stephen Ritchie and Nancy Young, has passed an ethics review by the Laurentian University Research Ethics Board.

Your ethics approval is valid until April 20 2010. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written clearance from the REB. The Board must provide clearance for any modifications before they can be implemented. If you wish to modify your research project, please refer to [\[http://www.laurentian.ca/Laurentian/Home/Research/ResearchEthics/Research+Ethics+Board.htm?Laurentian_Lang=en-CA\]](http://www.laurentian.ca/Laurentian/Home/Research/ResearchEthics/Research+Ethics+Board.htm?Laurentian_Lang=en-CA) to complete the appropriate form Revision or Modification to an Ongoing Application. Please submit a request for renewal form to the Office of Research if your research involving human subjects will continue for longer than one year. Should there be any changes to the project the researcher is required to advise the Laurentian University Research Ethics Board. Please ensure that your research complies with TCPS policies.

An annual report is due on April 20 2010 and a final report at the end of the project on September 30 2010. Please quote your REB file number (REB 2009-03-08) on future correspondence.

Congratulations and best of luck in conducting your research.



Daniel Côté, Acting Chair
Laurentian University Research Ethics Board
Laurentian University

February 26 2010

Stephen Ritchie
Human Kinetics – Ph.D. Student at the School of Rural and Northern Health
Laurentian University

This is to inform you that the request for modifications for the study entitled *Developing Aboriginal Youth Resilience and Well-Being Through Outdoor Adventure Leadership Experience* (2009-03-03 R1), presented by Stephen Ritchie and Nancy Young, has passed an ethics review by the Laurentian University Research Ethics Board.

Your ethics approval is valid until February 26 2011. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written clearance from the REB. The Board must provide clearance for any modifications before they can be implemented. If you wish to modify your research project, please refer to

[\[http://www.laurentian.ca/Laurentian/Home/Research/ResearchEthics/Research+Ethics+Board.htm?Laurentian_Lang=en-CA\]](http://www.laurentian.ca/Laurentian/Home/Research/ResearchEthics/Research+Ethics+Board.htm?Laurentian_Lang=en-CA) to complete the appropriate form Revision or Modification to an Ongoing Application. Please submit a request for renewal form to the Office of Research if your research involving human subjects will continue for longer than one year. Should there be any changes to the project the researcher is required to advise the Laurentian University Research Ethics Board. Please ensure that your research complies with TCPS policies.

An annual report is due on February 26 2011 and a final report at the end of the project on October 15 2011. Please quote your REB file number (REB 2009-03-03 R1) on future correspondence.

Congratulations and best of luck in conducting your research.



Irene Koren, Acting Chair
Laurentian University Research Ethics Board
Laurentian University



Laurentian University
Université Laurentienne

Research, Development &
Creativity Office
Bureau de la recherche,
du développement et de la créativité
Tel/Tél.: 705-675-1151, 3944
Fax/Téléc.: 705-671-3850

June 30 2010

Stephen Ritchie
Human Kinetics – Ph.D. Student at the School of Rural and Northern Health
Laurentian University

This is to inform you that the request for modifications for the study entitled *Developing Aboriginal Youth Resilience and Well-Being Through Outdoor Adventure Leadership Experience* (2009-03-03 R2), presented by Stephen Ritchie (Nancy Young, supervisor), has passed an ethics review by the Laurentian University Research Ethics Board.

Your ethics approval is valid until June 30 2011. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written clearance from the REB. The Board must provide clearance for any modifications before they can be implemented. If you wish to modify your research project, please refer to [\[http://www.laurentian.ca/Laurentian/Home/Research/ResearchEthics/Research+Ethics+Board.htm?Laurentian_Lang=en-CA\]](http://www.laurentian.ca/Laurentian/Home/Research/ResearchEthics/Research+Ethics+Board.htm?Laurentian_Lang=en-CA) to complete the appropriate form Revision or Modification to an Ongoing Application. Please submit a request for renewal form to the Office of Research if your research involving human subjects will continue for longer than one year. Should there be any changes to the project the researcher is required to advise the Laurentian University Research Ethics Board. Please ensure that your research complies with TCPS policies.

A final report is due on February 1st 2011 (as indicated on your submitted documents). Please quote your REB file number (REB 2009-03-03 R2) on future correspondence.

Congratulations and best of luck in conducting your research.

Irene Koren, Acting Chair
Laurentian University Research Ethics Board
Laurentian University

APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS

Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

TYPE OF APPROVAL	New	Modifications to project	Time extension	X
Name of Principal Investigator and school/department	Stephen Ritchie (Nancy Young; supervisor) — Human Kinetics- Rural and Northern Health			
Title of Project	<i>Developing Aboriginal Youth Resilience and Well-Being Through Outdoor Adventure Leadership Experience</i>			
REB file number	2009-03-03 R3			
Date of original approval of project	April 29 2009			
Date of approval of project modifications or extension (if applicable)	February 26 2010 (R1); June 30 2010 (R2); January 31 st 2011 (R3)			
Final/Interim report due on	October 15 2011			
Conditions placed on project	Final or interim report (new proposal as R4) on October 15 2011			

During the course of your research, no deviations or changes to the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please complete the appropriate [REB form](#).

All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate [REB FORM](#). In all cases, please ensure that your research complies with the [Tri-Council Policy Statement \(TCPS\)](#). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations, and best of luck in conducting your research.



Jean Dragon Ph.D. (Ethics officer — LU) for Daniel Côté, Ph.D.
 Chair of the *Laurentian University Research Ethics Board*
 Laurentian University

APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS
 Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

TYPE OF APPROVAL	New	Modifications to project	Time extension	X
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Name of Principal Investigator and school/department	Stephen Ritchie (Nancy Young; supervisor) — Human Kinetics- Rural and Northern Health
Title of Project	<i>Developing Aboriginal Youth Resilience and Well-Being Through Outdoor Adventure Leadership Experience</i>
REB file number	2009-03-03 R4
Date of original approval of project	April 29 2009
Date of approval of project modifications or extension (if applicable)	February 26 2010 (R1); June 30 2010 (R2); January 31 st 2011 (R3); October 14 th 2011 (R4)
Final/Interim report due on	October 14 2012
Conditions placed on project	Final or interim report on October 14 2012

During the course of your research, no deviations or changes to the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please complete the appropriate [REB form](#). All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate [REB FORM](#). In all cases, please ensure that your research complies with the [Tri-Council Policy Statement \(TCPS\)](#). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations, and best of luck in conducting your research.



Jean Dragon Ph.D. (Ethics officer – LU) for Susan James, Ph.D.
 Acting Chair of the *Laurentian University Research Ethics Board*
 Laurentian University

APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS

Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

TYPE OF APPROVAL	New	Modifications to project	Time extension	X
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Name of Principal Investigator and school/department	Stephen Ritchie (Nancy Young; supervisor) — Human Kinetics- Rural and Northern Health
Title of Project	<i>Developing Aboriginal Youth Resilience and Well-Being Through Outdoor Adventure Leadership Experience</i>
REB file number	2009-03-03 R5
Date of original approval of project	April 29 2009
Date of approval of project modifications or extension (if applicable)	February 26 2010 (R1); June 30 2010 (R2); January 31 st 2011 (R3); October 14 th 2011 (R4); January 20 th 2012;
Final/Interim report due on	January 20 th 2013
Conditions placed on project	Final or interim report on January 20 th 2013

During the course of your research, no deviations or changes to the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please complete the appropriate [REB form](#). All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate [REB FORM](#). In all cases, please ensure that your research complies with the [Tri-Council Policy Statement \(TCPS\)](#). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations, and best of luck in conducting your research.



Jean Dragon Ph.D. (Ethics officer – LU) for Susan James, Ph.D.
Acting Chair of the *Laurentian University Research Ethics Board*
Laurentian University

Appendix C: Research Agreement



Research Agreement

Title of Research Project: *Developing Aboriginal Youth Resilience and Well-Being through Outdoor Adventure Leadership Experience*

Project Duration: *April 15, 2009 to December 31, 2010*

1.1 With respect to the research project named above, this research agreement establishes the basis of the relationship between:

Wikwemikong Unceded Indian Reserve Number 26, Ontario
(WUIR-No26)
and

Laurentian University of Sudbury
(LU)

In signing this document, representative(s) from **Laurentian University of Sudbury (LU)** and representative(s) from **Wikwemikong Unceded Indian Reserve Number 26 (WUIR-No26)** acknowledge the following:

2.1 Purpose - The purpose of this research project, as discussed with and understood in the community of Wikwemikong is to promote resilience and well-being for Aboriginal youth in Northeastern Ontario through culturally relevant outdoor adventure leadership experience. The experience will involve an outdoor adventure leadership training program while participating on a multi-day wilderness canoe expedition. The direct benefits of individual participation in this research will include learning about leadership, outdoor skills, Aboriginal culture, and traditional practices from trained facilitators and leaders within the Wikwemikong community. There may also be direct benefits for the entire community since the program is designed to train youth as leaders who may make a positive difference in their community by using their leadership abilities in diverse ways at school, in sport and recreation, in other youth programs, or through other programs that may be either initiated by the community or by the youth themselves.

2.2 The principle investigator (PI), Stephen Ritchie is a doctoral student in the School of Rural and Northern Health at LU and this project forms part of his thesis related research. The PI, research process and key decisions are all supervised by a PhD supervisor and committee established through LU and also by the Wikwemikong Community Research Steering Committee (WCRSC) established to supervise this research in the Wikwemikong community.

2.3 **WUIR-No26** is responsible for all programming and obtaining general liability insurance in the amount of \$2,000,000 per occurrence (minimum) for all program related components of the outdoor adventure leadership experience. This will include all the pre-trip planning, wilderness expeditions,

training exercises, travel, and other experiences affiliated directly or indirectly with the program. The PI and representatives from **LU** will act in an advisory and supportive capacity for any program related decisions.

2.4 The PI and the WCRSC will be jointly responsible for the research components of the experience. The PI will be responsible for most of the research related components, however, the WCRSC is also responsible for supervising, advising and screening all research activities, with the objective of protecting and promoting the best interests of the Wikwemikong community. Essentially all programming activities are the responsibility of **WUIR-No26**, and all research activities are the responsibility of the PI as supervised by the WCRSC and the PhD Committee at **LU**.

2.5 The study will use both quantitative and qualitative methods with the objective of implementing “transformational change” for the participants involved. The methods will employ principles of community-based participatory research to ensure that both the research and program are implemented with the best interest of the Wikwemikong community in mind.

2.6 The development of this project is based on sincere communication between Wikwemikong community members and researchers from **LU**. All efforts will be made to incorporate and address local concerns and recommendations at each step of the project.

2.7 All research activities, reports or publications arising from the research will conform to the research principles outlined in the Guidelines for Ethical Aboriginal Research prepared by the Noojmowin Teg Health Centre, the Guidelines for Health Research Involving Aboriginal People (CIHR Guidelines, 2007), and the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (Interagency Advisory Panel on Research Ethics, 2005).

2.8 All data obtained from, or collected shall be coded in a manner that ensures the anonymity and confidentiality of the research participants; that is, data will be coded in a way that does not allow for direct identification of individual research participants unless they have specifically indicated (written documentation) that their identity be made known.

2.9 Upon completion of the study, data and records that are collected in the context of the research study will remain the property of **WUIR-No26** and **LU**, and will be stored in a secure location at **LU** for a period of seven years. This could include completed surveys or questionnaires, transcripts and tapes from video, audio, or interviews. The analysis and interpretation that arises from the raw data will also remain the property of both **WUIR-No26** and **LU**.

2.10 Audiotapes, videotapes, questionnaire responses, and all other notes will be labeled with pseudonyms or codes. Transcripts, surveys and other raw data will only be seen by members of the research group. The data collected and stored may not be made accessible to other researchers and/or used for research purposes other than those agreed upon without **WUIR-No26's** knowledge and consent and without informed consent of participants.

2.11 Informed consent of individual participants is to be obtained in two distinct ways. During the first phase of the research (talking circles and focus groups), the informed consent is verbal, and for youth participation in the outdoor adventure leadership experience, the informed consent is written.

2.12 Authors of a publication (community reports, journal articles, presentations, or other material) will be listed in the order of the significance of their contribution to the writing of the publication and

will include all, and only those individuals who have made a significant intellectual or scholarly contribution to the work reported, and without whose contribution the work would not be complete. Authors of a piece may include the researchers, Wikwemikong Community members, volunteers, WCRSC members, or any other person who has made contributions to the writing of the publication. Members of the WCRSC and other individuals instrumental to the project will be acknowledged in all publications.

2.13 Any reports or publications arising from the research shall be submitted to the WCRSC (or a designated person from the committee) prior to distribution to communities and agencies or submission for publication. Through this process, the WCRSC will then have the right to accept or reject any distribution or publication, however every effort will be made to revise or modify the report to the satisfaction of the WCRSC. The Wikwemikong Community (through the WCRSC) shall be provided with copies of all reports/papers derived from the research project. Review of any written reports should occur in a timely fashion and should preferably be completed in less than 30 days and not more than 60 days, at which time notification of final acceptance, acceptance with modifications, or rejection will be given to the principle author of the report.

2.14 The researcher shall report on an ongoing basis to the community and/or WCRSC (or designate) on the development, planning, implementation and results of the research.

2.15 The community's (**WUIR –No26**) commitment to the researchers is to recommend capable and reliable community members to collaborate or to be employed in this project. **WUIR-No26** will also seek to stay informed about the progress of the project, and help in leading the project toward meaningful results.

2.16 The PI's commitment to the community is to inform the community about the progress of the project in a clear, specific, and timely manner. The PI will also act as a resource to the community on research related questions.

2.17 FIPPA Clause -To the extent that **LU** provides any personal information to **WUIR-No26** in connection with this Agreement, **WUIR-No26** must comply with the requirements of the Freedom of Information and Protection of Privacy Act (Ontario) and shall only use this Personal Information for the purposes necessary to fulfill its obligations under such Agreement, and shall not disclose such Personal Information except as authorized in writing by the University Secretary of Laurentian or required by law. **WUIR-No26** shall at all times implement reasonable security measures to protect such personal information against such risks as unauthorized access, collection, use, disclosure or disposal. To the extent that **WUIR-No26** provides any personal information to **LU** in connection with this Agreement, **LU** must comply with the requirements of the Freedom of Information and Protection of Privacy Act (Ontario) and shall only use this Personal Information for the purposes necessary to fulfill its obligations under such Agreement, and shall not disclose such Personal Information except as authorized in writing by the University Secretary of Laurentian or required by law. **LU** shall at all times implement reasonable security measures to protect such personal information against such risks as unauthorized access, collection, use, disclosure or disposal.

2.18 Indemnification Clause -**WUIR – No26** shall at all times indemnify and save harmless **LU** , its officers, employees and agents against all actions, damages, claims, demands and losses, including legal expenses incurred as a result of any claim demand or action, by whomsoever made, brought or instituted, arising out of or in any way related to this agreement or the assignment, unless the same is caused by the negligence of an officer, employee or agent of **LU** while acting within the scope of

his/her employment. **LU** shall at all times indemnify and save harmless **WUIR – No26** its officers, employees and agents against all actions, damages, claims, demands and losses, including legal expenses incurred as a result of any claim demand or action, by whomsoever made, brought or instituted, arising out of or in any way related to this agreement or the assignment, unless the same is caused by the negligence of an officer, employee or agent of **WUIR – No26** while acting within the scope of his/her employment.

We hereby acknowledge and agree to these conditions of agreement.

<u>Rosella M. Kinoshamey</u>	<u>Health Services Director</u>
PRINT NAME	TITLE or POSITION
Representative from WUIR-No26	

<u>Rosella M. Kinoshamey</u>	<u>May 27, 2009</u>
Signature of Representative from WUIR-No26	Date (of signature)

<u>Paul Colilli</u>	
PRINT NAME	TITLE or POSITION
Representative from LU	
<u>[Signature]</u>	<u>May 11/09</u>
Signature of Representative from LU	Date (of signature)

<u>[Signature]</u>	<u>May 12/09</u>
Stephen Ritchie, Laurentian University	

_____	_____
_____	_____

Appendix D: Research Information and Consent Forms

RESEARCH INFORMATION AND CONSENT FORM (VERBAL)

To: Talking Circle Research Participant

Research Study Title: Developing Aboriginal Youth Resilience and Well-Being through Outdoor Adventure Leadership Experience

Investigator: Stephen Ritchie

Dates of Study: April 2009 to October 2010

Thank you for giving of your time and experience today. You have been invited to participate in this focus group or talking circle by your community representatives in association with researchers from Laurentian University. The project study is titled “Developing Aboriginal Youth Resilience and Well-Being through Outdoor Adventure Leadership Experience”. The purpose of this project is to identify and better understand ways that outdoor adventure experiences may help develop leadership and promote resiliency and well-being for youth in your community.

The information gathered from this discussion will be used for both research and program design material. The intent is to develop an effective outdoor adventure leadership program and associated training material that will directly benefit the youth from your community. There is also a Community Research Steering Committee that is guiding this project. Currently, members of this committee include Mary Jo Wabano, Duke Peltier, Rosella Kinoshameg, Diane Jacko, Daniel Manitowabi, Rita Corbiere, Tim Ominika, Amanda Richards, and Cody Wassengesio George.

We, as members of the collaborative research team, appreciate any time, ideas and suggestions that you may have, and to help guide our discussion, we have several questions that were prepared by the Community Research Steering Committee to help us co-create an effective program together. With your permission, we would also like to record the meeting so we are able to capture all the information and discussion in its entirety.

All of the information you share with us will be held in confidence throughout and after the study, and will only be reviewed by you and the research team. Once we have transcribed the data from the audio recorders we intend to convert your responses so that they remain anonymous. However, since the number of participants in the focus group or talking circle is not very large, confidentiality may not be ensured since individual comments may be identifiable. On the other hand, if you prefer that your responses remain identifiable (who said what), please let us know and we will do so. The results from this focus group or talking circle will be analyzed and the results may eventually be published in journal articles and presented at national and international conferences. Once the study is completed, all data including audio, video, and

transcribed data will be stored in a secure location on the Laurentian University campus for a period of seven years. Please feel no obligation to participate in this talking circle. You are free to leave at any time without any consequences for doing so, though we hope you will be willing to help with the initiative. Also, please stop us at any time during the talking circle if you have any questions or concerns, and we will certainly address them immediately.

After the talking circle, any questions, concerns, or additional ideas you may have can be addressed to Laurentian University Researchers or any member of the Community Research Steering Committee (named above).

You can reach me directly by telephone at 705-675-1151 Ext. 1046. Alternatively, you can contact my PhD Supervisor, Nancy Young, PhD, at 705-675-1151 Ext. 4014. You may also contact Mary Jo Wabano (from the Waasa Naabin Youth Centre) at 705-859-3597, since she is also a Wikwemikong community research collaborator in this project. If you have particular concerns with the ethics of this study we wish to invite you to contact Jean Dragon, PhD of the Laurentian University Research Development & Creativity Office directly at (705) 675-1151, ext. 3213 (jdragon@laurentian.ca).

Thank you for your time, interest, and participation.

Important Note

This verbal consent was read or reviewed verbally prior to participants in a focus group or talking circle. Project title, names and contact information were written on a flip chart or white board prior to the start of the session, and copies of the research information and consent form (Page 1 and 2) were made available for those from the session who wanted one. This form simply acknowledges that the verbal consent was completed as planned.

Verbal Consent Acknowledgement

I have participated in this talking circle and acknowledge that this verbal consent was reviewed with participants and it seemed to be understood and accepted by all those present.

<i>Shaded Area For Researcher Use Only</i>	
_____ Witness Name (PLEASE PRINT)	_____ Talking Circle Reference
_____ Witness Signature	_____ Date
_____ Research Facilitator Name(s)	_____ Date
_____ Research Facilitator Signature(s)	_____ Date
<u>Names of Talking Circle Participants</u>	
_____	_____
_____	_____
_____	_____

Note: Please use reverse side of this page to include the names of additional participants.

RESEARCH INFORMATION AND CONSENT FORM (WRITTEN)

To: Youth Research Participant and Parent(s) or Legal Guardian(s)

Research Study Title: Developing Aboriginal Youth Resilience and Well-Being through Outdoor Adventure Leadership Experience

Investigator: Stephen Ritchie

Dates of Study: April 2009 to November 2011

The following information and consent form describes the research study in detail with the intent that you clearly understand the nature of the experience, what is required of you, the benefits for you and your community, how your personal information and data will be treated, the risks involved, your right to withdraw at any time, and who to contact for more information or to share any concerns that you may have.

Overview of Purpose, Experience & Benefits

The purpose of this research is to promote resilience and well-being for Aboriginal youth in Northeastern Ontario through a culturally relevant outdoor adventure leadership experience. The experience will involve an outdoor adventure leadership training program while participating on a ten-day wilderness canoe expedition. The direct benefits of individual participation in the program will include learning about leadership, outdoor skills, Aboriginal culture, and traditional practices from trained facilitators and leaders within your community. There may also be direct benefits for the entire community since the program is designed to train youth as leaders who may make a positive difference in their community by using their leadership abilities in diverse ways at school, in sport and recreation, in other youth programs, or through other programs that may be either initiated by the community or by the youth themselves.

Commitments Required

Beyond the canoe trip experience, the research study will involve your participation by completing survey questionnaires at three different times (before the experience, after the experience, and approximately 12 months after the experience), involvement in several group talking circles, and recording your personal observations in a daily journal. After the trip your journal will be collected and the pages photocopied for analysis. You may be asked to participate in a conversational interview, which is essentially an informal interview that would occur at a convenient time during the day. The research will also involve the recording of events using audio recorders, digital cameras (photos), and video recorders.

Confidentiality & Anonymity

Since your contributions will be recorded for future analysis, you should know that your identity (name) will not be revealed to anyone outside of the research team and designated mental health professionals from your community. We are committed to your health and well-being throughout this process, which is why the information you provide (from forms and the research questionnaire) will be reviewed carefully prior to departure on the outdoor adventure leadership

experience. After review of this information, if we are concerned about you or your health in any way, we will contact you, your parent(s), or your guardian(s) directly to discuss these concerns. With your permission, we may then also contact mental health professionals from your community.

After this review of your personal information prior to your participation in the experience, we will then use identification numbers instead of personal names on all information and data that you provide. This will mean that your information will be recorded, stored, and analysed anonymously so that your name or identity will not be known during this process, unless you indicate to us that you prefer that it remain known. Analyzed results may eventually be published in journal articles and presented at conferences. Any information that you provide will be stored in a secure location on the Laurentian University campus for a period of seven years.

Risks Involved

There will be risks involved with your participation. It is expected that you will encounter many challenging situations associated with remote wilderness travel including but not limited to rapids, waves, rugged portage trails, camping in non-designated areas, and exposure to a variety of weather conditions. The risks associated with these situations could result in a variety of minor to potentially very serious physical injuries. However, trained outdoor leaders will be facilitating the experience and every precaution will be taken to ensure your safety and avoid or minimize these potential risks. It is also expected that there may be other mental, emotional and social risks involved in the experience. Some of these risks may include but are not limited to increased levels of anxiety, fear, frustration, and mood swings associated with the challenges of remote expedition travel in a small intact group of people that is living, traveling and working together for ten days in a row. However, you should also know that these challenges are part of a program that is designed to develop your leadership and promote resiliency which are protective factors for many of these same physical, mental, emotional and social risks.

Right to Withdraw from Study

Your participation in this research study is strictly voluntary, and you have the right to withdraw from it at any time without penalty. However, you should know in advance that there will be times when immediate physical withdrawal from the canoe expedition may not be possible, or must be delayed for a period until it is safe and feasible to do so. In other words, if a participant wishes to withdraw from the canoe expedition, it may not be possible until the trip reaches an access point since much of the voyage will be in wilderness areas. Even though the experience will involve a remote wilderness expedition, you will still have the right to withdraw from participation in any other part of the study components at any time (talking circles, focus groups, journaling, interview), although you may still wish to continue with the leadership experience. You also have the right to have all of your data removed from the study, and with your permission it will be destroyed.

Contact Information

I (Stephen Ritchie) am a doctoral student in the School of Rural and Northern Health, and also a faculty member in the School of Human Kinetics at Laurentian University. If you have any questions or concerns about the study or about being a participant, you can call me directly at 705-675-1151 Ext. 1046. Alternatively, you can contact my PhD Supervisor, Nancy Young, PhD, at 705-675-1151 Ext. 4014. You may also contact Mary Jo Wabano (from the Waasa Naabin Youth Centre) who is also a Wikwemikong community research collaborator in this project at 705-859-3597. If you have any other particular concerns with the ethics of this study we wish to invite you to contact Jean Dragon, PhD of the Laurentian University Research Development & Creativity Office directly at (705) 675-1151, ext. 3213 (jdragon@laurentian.ca).

Thank you for your time, interest, and willingness to participate.

Consent and Agreement

I have reviewed and understand this consent form (page 1 and 2) and I agree to participate in this research study with the understanding that I may withdraw at any time if I desire.

Do you prefer to have your data remain anonymous? Yes No

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Participant's Name (PLEASE PRINT)

Identification Number

Male / Female

Sex (PLEASE CIRCLE)

Date of Birth: DD / MM / YY

Participant's Signature

Date (of signature)

I have reviewed and understand this consent form (page 1 and 2) and agree to allow the above named minor to participate in this research study.

Parent or Legal Guardian's Name
(PLEASE PRINT)

Parent or Legal Guardian's Signature

Date (of signature)

RESEARCH INFORMATION AND CONSENT FORM

To: Youth Research Participant and Parent(s) or Legal Guardian(s)
Research Title: Wikwemikong Youth Health and Well-Being Status
Investigator: Stephen Ritchie
Dates of Study: April 2010 to October 2011

The following information and consent form describes the purpose of the research, what is required of you, the benefits and opportunities for you and your community, how your personal information and data will be treated, the risks involved, your right to withdraw at any time, and who to contact for more information or to share any concerns that you may have.

Overview of Purpose, Involvement and Opportunities

The purpose of this research study is to determine if there are short-term self-rated health status changes among Wikwemikong youth ages 12-18 years old. Your involvement in this study will be to complete a Health and Well-Being Questionnaire (HWBQ) at two different times (initial completion and approximately 40 days later). Your responses will indicate what you think about your own mental, physical, emotional, and spiritual health. The compiled results will provide us information concerning self-rated health among the group of youth, and whether there are any changes in health status over time. The HWBQ will take between 15 and 30 minutes to complete each time, and completing this questionnaire is all that is required of you. Please note that your individual scores will not be available to you.

Benefits and Opportunities

There may be some minor compensation provided to you for your willingness to participate in the completion of the HWBQ. The information you provide will be compared to changes in health among other youth who participated in a culturally relevant outdoor adventure leadership experience (OALE) involving a 10-day canoe excursion. This comparison will help us understand whether the OALE program was beneficial for the holistic health of the youth involved. It will also help us assess if it is an effective program for the Wikwemikong community. Please contact Lawrence Enosse at the Wassa Naabin Youth Centre (Tel: 705-859-3597 & E-mail: waasanaabin@amtelecom.net) if you are interested in participating in the OALE and he will provide you with more information, however your participation in the OALE is strictly voluntary.

Confidentiality, Anonymity & Risks

Since your contributions will be recorded for future analysis, you should know that your identity (name) will not be revealed to anyone outside of the research team. We will use identification numbers instead of personal names on all information and data that you provide. This will mean that your information will be recorded, stored, and analysed anonymously so that your name or identity will not be known during this process, unless you indicate to us that you prefer that it remain known. The findings from the study may eventually be published in journal articles and presented at conferences. Any information that you provide will be stored in a secure location

on the Laurentian University campus for a period of seven years. There are no substantial risks involved with your participation since you will simply be completing a questionnaire.

Right to Withdraw from Study

Your participation in this research study is strictly voluntary, and you have the right to withdraw from it at any time without penalty. You also have the right to have all of your data (questionnaires) removed from the study, and with your permission they will be destroyed.

Contact Information

I (Stephen Ritchie) am a PhD Candidate in the School of Rural and Northern Health, and also a faculty member in the School of Human Kinetics at Laurentian University. If you have any questions or concerns about the study or about being a participant, you can call me directly at 705-675-1151 Ext. 1046. Alternatively, you can contact my PhD Supervisor, Nancy Young, PhD, at 705-675-1151 Ext. 4014. You may also contact Mary Jo Wabano, Health Services Director (at the Nahndahweh Tchigehgamig Health Centre) who is also a Wikwemikong community research collaborator in this project. She can be reached at 705-859-3164. If you have any other particular concerns with the ethics of this study please contact Jean Dragon, PhD of the Laurentian University Research Development & Creativity Office directly at (705) 675-1151, ext. 3213 (jdragon@laurentian.ca).

Consent and Agreement

I have reviewed and understand this consent form (page 1 and 2) and I agree to participate in this research study with the understanding that I may withdraw at any time if I desire.

Do you prefer to have your data remain anonymous?

☐

Yes

☐

No

Shaded Area For Researcher Use Only

Participant's Name (PLEASE PRINT)

Identification Number

Male / Female

Sex (PLEASE CIRCLE)

Date of Birth: DD / MM / YY

Participant's Signature

Date (of signature)

I have reviewed and understand this consent form (page 1 and 2) and agree to allow the above named minor to participate in this research study.

Parent or Legal Guardian's Name
(PLEASE PRINT)

Parent or Legal Guardian's Signature

Date (of signature)

Thank you for your time, interest, and willingness to participate in this research.

Summer, 2010 [and 2011]

RE: Research Study - Developing Youth Resilience and Well-Being through Outdoor Adventure Leadership Experience

Dear Youth Leader,

I hope that all is well with you since our outdoor experience together during the summer of 2010. As you recall, this experience also involved research, and the following questionnaire is an important part of the research study that you participated in as a youth leader in training. We strongly encourage you to complete the questionnaire as soon as possible, and then return it in the self-addressed envelope provided or leave it with Lawrence Enosse at the Waasa Naabin Youth Centre.

As a reminder, the purpose of this research was to promote resilience and well-being through relevant outdoor adventure leadership experiences. Your responses on this questionnaire will be important for us and will be recorded for future analysis, but you should know that your identity (name) will not be revealed to anyone outside of the research team. All the information that you provide will be stored in a secure location for a period of seven years.

Your participation in this research study is strictly voluntary, and you have the right not to complete this questionnaire and to withdraw from the study at any time without penalty, although we hope you will be willing to continue to help with this initiative. You also have the right to have all of your data removed from the study, and with your permission it will be destroyed. If you have any questions or concerns about the study or about being a participant, you can call me directly at 705-675-1151 Ext. 1046. Alternatively, you can contact my PhD Supervisor, Nancy Young, PhD, at 705-675-1151 Ext. 4014. You may also contact Mary Jo Wabano (from the Waasa Naabin Youth Centre) at 705-859-3597. Mary Jo is also a Wikwemikong community research collaborator in this project. If you have any other particular concerns with this study we also wish to invite you to contact Jean Dragon, PhD from the Laurentian University Research Development & Creativity Office directly at (705) 675-1151, ext. 3213.

Thank you again once again for your participation.

Sincerely,



Stephen Ritchie
Doctoral Candidate and Assistant Professor
Laurentian University, School of Human Kinetics
935 Ramsey Lake Road, Sudbury, ON P3E 2C6

Appendix E: Qualitative Interview Guide - Phase 1

QUALITATIVE INTERVIEW GUIDE – Phase 1

QUESTIONS FOR FOCUS GROUPS

Seniors and Elders: April 24, 2009

Mental Youth Workers: May 13, 2009

1. “Describe your most memorable experience as a youth growing up.”
2. “What do youth need to know to grow up well here in Wiky?”
 - a. Probe (Optional): “How do you describe youth who grow up well here despite the many problems they face?”
 - b. Probe (Optional): “What does being healthy mean to you and others in your family and community?”
3. “What do youth need to do to keep healthy, mentally, physically, emotionally, spiritually?”
4. “How would you describe mental health and well-being for Aboriginal youth?”
 - a. Probe: “What is resilience?”
 - b. Probe: “How do youth develop resilience?”
5. “How do outdoor adventure experiences teach our youth?” (Optional)
 - a. Probe: “Describe some outdoor experiences and how they might teach our youth.”
 - b. Probe: “What are the role of stories and legends for teaching our youth?”
 - c. Probe: “How do stories and legends act as metaphors for life?”

Describe/show the current OALE program with 6 leadership training modules (2008) and then describe/show the Walsh & Golins (1976) Process model.

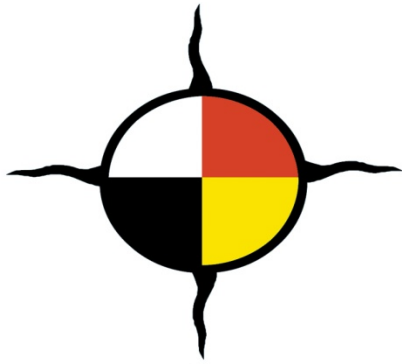
6. “What parts of the OALE are most important for promoting resilience and well-being?”
7. “How would you modify the current Wikwemikong OALE to ensure it is more culturally relevant?”
 - a. “More likely to promote resilience and well-being for youth in the community?”
8. “What specific activities, questions or techniques can we use each day of the OALE to promote resilience and well-being?”

Note:

Some of these questions were adapted from catalyst questions from the International Resilience Project across different cultures around the world. They were retrieved from the following report:

Ungar M, Liebenberg L. *The child and youth resilience measure (CYRM)* – 28 (Unpublished report). Halifax, NS: Resilience Research Centre; 2008.

Appendix F: OALE Program Summary



**Wikwemikong
Outdoor Adventure
Leadership Experience
(OALE) ©**

PROGRAM SUMMARY



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Indian Reserve Number 26
2011*

Program Summary Prepared for:
Nahndahweh Tchigehgamig Wikwemikong Health Centre
Waasa Naabin Youth Services Centre
Wikwemikong, ON, Canada

February 11, 2011

Prepared by:
Stephen Ritchie,
PhD Candidate, School of Rural and Northern Health *and*
Assistant Professor, School of Human Kinetics
Laurentian University, ON, CANADA

In Collaboration with:
Mary Jo Wabano,
Health Services Director, Nahndahweh Tchigehgamig
Wikwemikong Health Centre

Lawrence Enosse,
Program Manager, Waasa Naabin Youth Services Centre
Wikwemikong, ON, CANADA

Nancy L. Young, PhD
Canada Research Chair *and* Professor, School of Rural and Northern Health
Laurentian University, ON, CANADA

Collaborators:
Community Research Steering Committee, Wikwemikong, ON
Waasa Naabin Youth Services Centre, Wikwemikong, ON
Sport and Recreation Department, Wikwemikong, ON
Nadmadwin Mental Health Clinic, Wikwemikong, ON

This program summary was prepared for the Nahndahweh Tchigehgamig Wikwemikong Health Centre and the Waasa Naabin Youth Services Centre in Wikwemikong, Ontario CANADA. The purpose of this document is to provide a summary of the Wikwemikong OALE program so community members, the public, and any other interested parties will have a better understanding of how the program was designed and implemented.

Please contact authors for more information or permissions.

Suggested Citation

Ritchie, Stephen D., Wabano, Mary Jo, Enosse, Lawrence, & Young, Nancy L. (2011). *Wikwemikong Outdoor Adventure Leadership Experience (OALE): Program Summary*. Wikwemikong, ON: Nahndahweh Tchigehgamig Wikwemikong Health Centre.

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ACKNOWLEDGEMENTS

The current Outdoor Adventure Leadership Experience (OALE) is the result of several years of ongoing research and development. The project would not have been possible without the involvement and support from numerous individuals and departments from Wikwemikong, Ontario and Laurentian University in Sudbury, Ontario CANADA. Mary Jo Wabano collaborated directly on all phases of the project and her leadership ensured that the project maintained momentum and carried through to fruition. Duke Peltier and Robert Schinke coordinated much of the early research, ideas and vision for the project and supported the initial pilot project in 2008. In 2009, full-time staff from the Waasa Naabin Youth Services Centre (Amy Assinewai, Nimkii Lavell, Leanne Mishibinijima, Lyle Peltier, and Graham Trudeau) were instrumental in the development of the Outdoor Adventure Leadership Experience (OALE) Program. In 2010 Tyrone Shawana and Quinten Peltier joined the youth services team. We would also like to thank all the youth participants (n=80) from 2008-10, and the numerous part-time staff that were hired as assistant leaders. A special thanks goes to Philip Green who coordinated the OALE programs in 2009 and 2010. The Wikwemikong Community Research Steering Committee included Duke Peltier, Rita Corbiere, Daniel Manitowabi, Diane Jacko, Rosella Kinoshameg, Amanda Richards, Cody Wassengeso-George, and Pierce Wemigwans. They provided oversight and guidance with the research methodology as well as numerous program implementation suggestions. The OALE program was also refined based on valuable insights gained from focus group members from the Amikook Seniors Centre, staff from the Nadmadwin Mental Health Clinic, and the Health Services Committee. Stephen Ritchie's PhD committee— including Nancy Young, Brenda Restoule, Robert Schinke, and Keith Russell— also provided significant guidance through all phases of the project. Jeremie Carreau and Danielle Brinkman contributed several experiential activities and edited the manuscript. Finally, Lawrence Enosse is the current program manager at the Youth Services Centre, and he is ensuring sustainability of the OALE program for 2011 and into the future.

“On day 3, I told myself that I was going to be here for seven more days. I have to do what I have got to do. So I started thinking more positive about the trip. I remembered how my mom wanted me to learn my inner strengths. So I thought about my mom and she is my inspiration. I was thinking that if I wanted to go home, what would she think about it? So just thinking about that put me in a better mood. I made myself be happy and it was a nice day outside. So I bathed in the water. I felt clean and fresh. I had a whole new attitude. After I woke up, I changed, put the tents away, and cleaned up a lot. I remember the canoe ride and we went through a bunch of rapids. We fell in the water, got wet, and went through a bunch of storms. It was hot, it was cold, and we got some rain. After all that, I thought ‘wow, this is canoeing’. I enjoyed it. I loved it.”

Female Youth Participant, 15 years old, OALE Summer 2009

HONOURING OUR LEADERS

OALE Participants 2009

Anthony George, Jessica Trudeau, Marshall Flamand, Elijah Roy, Moirah Shawana, Mark Roy, Kalyne Beaudry, Sheldon Bondy, Lance Gaiashk, Keaton Francis, Shaneka Manitowabi, Issac Wemigwans, Dillon Ominika, Harmony Eshkawogon, Tasheena Recollet, Pierce Wemigwans, Darren Lavallee, Andrew Lavallee, Hillary Pangowish, Tyler Dokumm, Courtney Recollet, Raven Manitowabi, Deyanehra Dokum, Melissa Richard, Tyler Aiabens, Axl Enosse, Ashlay Jacko, Henry Earle, Mercedes Jackson, Wilfred Rivers, Gillian Ominika, Alvin Enosse, Katie Ominka, Jules Shawanda, Dezarae Wemigwans, Winona Ominika, Daniel Lewis, Jared Debassige, Pierce Manitowabi, Alec Shawana, Sheldon Manitowabi, Ryan Peltier, Anthony Manitowabi

OALE Participants 2010

Aaron Manitowabi, Brandon Pangowish, Adam Maiangowi, Alexandra Wemigwans, Darcy Osawamick, Deyanehka Dokum, Brandon Shigwadja, Dillan Peltier, Brianna Constantin, Jerry Wemigwans, Brooke Wakegijig, Karlene Fox, Mukwoos Eshkibok, Brooke Williams, Rita Manitowabi, Dalton Mishibinijima, Levi Shawana, Victor Eshkibok, Dalton Shawana, Mason Peltier, Jade Ominika, Neeganii Lavell, Peter Jacko, Eric Cooper, Hawk Recollet, Tacie Peltier, Ian Manitowabi, Tyler Pangowish, Kaella Earle, Zachery Fox, Sammy Peltier, Moirah Shawana, Isaac Wemigwans, Keaton Francis, Isaac Wemigwans, Winona Ominika, Sheldon Manitowabi, Katie Ominika, Dillon Ominika

OALE (Staff) Facilitators

Duke Peltier, Philip Green, Nimkii Lavell, John Dube, Leanne Mishibinijima, Lyle Peltier, Amy Assinewai, Graham Trudeau, Tim Christopher Peltier, Quentin Peltier, Alycia Shawana, Sabrina Shawanda, Zakkary Shawanda, Sheena Wassegijig, Susan Griffin, Brian Pitawanakwat, Tyrone Shawana, Aldophus Recollet, Jerome Kanasawe, Shaneece Manitowabi, Tasha Richards, Adrianna Osawamick, Danielle Shawana-Trudeau, Christina Shawongonabe, Lynette Odjig, Marcie Tabobondung, Dana Cooper, Alycia Shawana, Kaella Earle, Jessica Mae Manitowabi, Brandon Ominika, Dana Ominika, Ryan Peltier

PROGRAM OVERVIEW

The Outdoor Adventure Leadership Experience (OALE) is a leadership training program delivered to Wikwemikong youth ages 12-18 years, while they are participating in a 10-day wilderness canoe expedition. The OALE is designed so program is delivered in a unique way that reflects holistic learning in a self-directed manner. In other words, the outdoor experiential context of the learning ensures that youth participants are responsible for their own health and leadership development through a challenging journey of self-discovery. In essence, nature is the teacher, and staff are simply facilitators of the learning experience. As facilitators though, staff are encouraged to *intentionally* coordinate, arrange, discuss, plan, and work towards accomplishing program goals for each individual youth and for the group as a whole. Since youth participants have a variety of outdoor experience, the OALE begins with basic instruction in outdoor living and travel skills, and relatively low expectations for camp efficiency, paddling proficiency, and daily travel distance. **Research results have confirmed that the OALE is effective at promoting resilience and well-being for the youth participants.**

The Wikwemikong OALE program occurs entirely outdoors during a ~100 km canoe excursion that has traditionally started from the French River Trading Post (Highway 69 bridge over the French River) to Prairie Point at the northeast end of Wikwemikong in northern Ontario, Canada. The excursion includes many natural challenges such as rapids, portages, waves, and weather that are managed in a progressive manner so as to build participant confidence

and promote the development of group cohesion. For example, planned travel distances each day are much less earlier in the expedition than later in the expedition, and the selected route remains in the relative shelter of the French River corridor for the first three to four days before venturing out along the exposed coast of Georgian Bay. Daily themes and experiential activities reinforce teachings from the leadership training manual. Elders from the community support the program through sharing local knowledge, facilitating a departure ceremony, and providing contextual teachings in the field. The excursion is also planned so that the arrival day in Wikwemikong coincides with a community feast to welcome the youth home, and recognize their accomplishments. It is not essential that all excursions follow the exact same route, however the OALE Principles guide all route and program planning decisions.

The following sections provide further details and guidelines for implementing the OALE effectively. We hope that this information will help explain how the program was designed and how staff facilitate the experience effectively.

Map of Wikwemikong Reserve and OALE Route



Purpose (Goals)

There are three explicit program goals: (1) Prepare youth as leaders; (2) Promote culture & community; and (3) Protect youth through resilience & well-being. These goals are introduced on the first day of the program, and then reinforced through OALE programming. It is important that the youth know these three goals, are reminded of them, and are encouraged to reflect on them throughout the OALE. On the other hand, completing the trip – paddling the 100+ km from start to finish – is an implicit goal. The reason that this travel goal is implicit is because it should be de-emphasized and presented as a possibility that is less important than the three explicit (stated) goals. Many outdoor adventure programs focus on the destination or adventure challenge as an explicit goal, such as: reaching a summit, completing a trek, or paddling a river. However, by de-emphasizing the destination goal in the OALE, the youth slowly assume ownership for this *obvious goal* as progress is made during the first few days of the experience. This allows the youth to spread their wings, develop their leadership, and learn to persevere and work together. Hence, taking ownership of the implicit destination goal helps the youth make progress towards reaching the explicit goals.

What is Leadership?

Leadership is *the capacity to connect with self and creation*. Leadership is also a process, not an outcome... a journey, not a destination. Each of us lives, thinks, reflects, and realizes things about ourselves and the world around us. We make decisions. As leaders, we understand that we have the ability to influence ourselves, other people, and the world around us. In other words, leadership is the process of discovering and developing a personal connection to our internal source of influence over ourselves (inward growth) and an external influence over Creation (outward expression), and making the world a better place to live in.

At its core, the essence of leadership is really the essence of self. It is simply coming to the realization that each of us has the capacity to take control of our own lives and steer the course of our future for maximum personal benefit and mutual community enhancement. This journey of leadership cannot be effective without a willingness to honestly examine our lives so that we are able to inventory our likes, dislikes, strengths, weaknesses, skills, values and dreams. Our commitment to this leadership process can only ever be as rewarding as the effort we put into it. We need to... reflect on our past... listen to others.... plan for our future...make change happen. This is what leaders do.

Leadership Training Modules

The six leadership training modules were developed over several years and there is a *Community Leadership Preparation Training Manual* available in the community as a supportive resource (Sport and Recreation Program, 2008). This other manual contains descriptions of each module with learning activities, discussion questions, and scenarios to reinforce learning objectives as well as the overall goal of preparing participants as leaders. The content from the six modules is not just available through the manual; it is also integrated into the OALE through the program principles and day themes. Staff use this other manual as a resource for implementing the OALE. Here below is a summary of the six leadership modules.

The Essence of Leadership

... is to realize that we have the ability to make a real difference in our own lives and in the lives of others. The essence of leadership is influence, and each of us is a leader in our own unique way because we influence ourselves and others. Our journey as leaders is shaped by our experiences, our culture and the world around us.

Connecting to Aboriginal Roots and Culture

... is to realize the importance of our Aboriginal roots and cultural ties in our own journey of personal leadership preparation. Understanding Aboriginal background and history leads to an enhanced sense of community connectedness. Positive relations promote the sharing of ideas and experiences throughout the community, which can encourage active leadership. We must grow into our role as leaders and accept our responsibility within the culture and community.

Creating a Personal Vision

... is understanding our strengths and gifts and then leveraging those to cultivate our dreams for a brighter future and better tomorrow. Developing a personal vision entails some personal reflection to identify the abilities and assets we each have to work with. Thinking creatively, being organized, and having a positive future orientation is key to making our vision a reality. Promoting values and morals that we feel strongly about increases our personal power and is foundational to realizing our vision of the future. Identifying role models who reflect these same ideals helps us learn more about ourselves and who we want to become.

Cultivating Persistence and Success

... is to learn from our mistakes, accept injustices, and persevere through hardship; but it is also about taking the time to recognize our accomplishments and celebrate successes no matter how small. Understanding the value of persistence in our personal leadership preparation and future success is a powerful life lesson. We must be 100% committed to our vision and goals if we want to be successful. Learning from mistakes and maintaining a positive outlook is critical to staying motivated through challenges. Friends, family, teammates and other supportive people can be resources to help us stay on the course to success.

Working Effectively With Others

... is about building strong relationships and developing our skills and abilities to effectively work with other people in a variety of different contexts. We will never know precisely where and when strong connections will benefit us in the future, but building those relationships now has immediate benefits in the present. Establishing a support network that we are able to resource is essential when working with others. We must be open-minded to diversity in other people's views, ideas, and experiences – we can learn from the unique perspectives of others. It is also important to have the skills to teach others, resolve conflicts, and foster a sense of character, confidence, and connectedness.

Leaving a Legacy

... is all about looking forward to create an ideal picture of an achievable future, and then living our lives now so that the future unfolds the way we envision it. Leaders make a difference in their lives and the lives of others. This “influence-ability” is the essence of leadership. Each of us is a leader whether we like it or not, and each of us has a significant influence on each other

and on the natural world surrounding us. Leaving a legacy in the future requires us to prepare ourselves as leaders in the present. Leadership preparation requires an honest in depth examination of who we are (strengths, weaknesses, interests, values) and where we came from (Aboriginal roots and culture). It is a personal journey that involves creating a personal vision, cultivating persistence and success, and working effectively with others. Leaders are intentional: influencing themselves, influencing others, creating community, respecting Mother Earth, and then leaving a legacy from the gift of our lives and how we live out each day.

OALE Principles

The following principles guided the development of the OALE program from 2008-2010 within the Wikwemikong community. They are primarily based on findings from several years of both research and experience within the community; however some of these principles are also well established in many other outdoor youth programs across the country, and many are well documented in the literature. Hence, most of these principles are not individually unique to the Wikwemikong OALE program; however collectively they do reflect a unique framework for programming, and they lay the groundwork for personal transformational change. Although this list of principles has guided development, it is not known conclusively how important each principle is in supporting the three program goals. They have been used more as a guideline for program development and implementation, rather than a list of rules that *must be followed*.

1. **Outdoor Adventure** – is the context and medium for the OALE. The OALE occurs within nature (outdoor context) and challenges (adventure medium) are embraced as necessary ingredients for the youth to prepare as leaders, experience persistence, and develop resilience; group cohesion and growth are fostered indirectly. Through careful planning, natural challenges are managed in a progressive manner so that early success with easier challenges (i.e. small rapids and short daily travel distances) lead to more significant accomplishments with more difficult challenges (i.e. larger waves in open water and longer daily travel distances).
2. **Traditional Territory** – uses historical trade routes and travel corridors. The OALE expedition route is planned within the traditional territory of the community to reinforce culture, history, heritage, and to generate numerous learning opportunities and teachable moments throughout the journey. Connections are enhanced further through specific exploratory activities such as camping at old village sites, examining pictographs, and hunting for ancestral burial grounds.
3. **Journeying Homeward** - creates opportunity for outdoor challenges and growth through self-propelled travel homeward. The OALE route is planned so that direction of travel is towards the community and wherever possible the final destination is a significant location within the community; this functions to strengthen community ties and increase personal motivation... *to arrive home*. The journey is ten days in length, which is deemed to be an appropriate length for personal transformation to occur.
4. **Goal Orientation** – is the essence of the OALE program using an expedition format with significant travel distances. The OALE has three program goals, and is also designed such that the travel between two points (departure & destination) creates a challenging but attainable travel goal (arriving at the destination) for each individual youth and the entire group. Youth participation in group goal-setting is encouraged in terms of selecting route options and other planned cultural learning experiences. Individual goal-

setting is also encouraged early in the experience and progress is reviewed periodically during the course of the excursion during talking circles and at evening debriefs.

5. **Experiential Education** – ensures that education occurs through both experience and reflection. Experiential education is both a philosophy and methodology. Experiential learning is defined as “learning by doing combined with reflection” (Priest & Gass, 2005, p.146). The OALE is implemented experientially and reflection is reinforced through daily themes, journal writing, experiential activities, and evening talking circles at the end of the travel day.
6. **Metaphoric Learning** – reflects a powerful process of learning through the use of analogies and symbolism to create parallel structures that occur between daily experiences and personal change. The change occurs through a personal transfer of learning that may extend to life beyond those experiences. The OALE creates opportunities to use metaphors to enrich and deepen learning experiences for the youth through stories, themes, activities, and intentional facilitation techniques. This strengthens the transfer of learning through positive personal change.
7. **Solo Reflection** – provides the youth an opportunity to process their experiences, face their fears and think about their future. The OALE is naturally intensive, socially rich, and experiential through the daily challenges of travel, however solo times for personal reflection and growth are intentionally designed into the program to provide a protected time for introspection.
8. **Intentional Facilitation** – trains OALE leaders to accept accountability for the effective implementation of the OALE program by following principles of experiential education and metaphoric learning. Intentionality also means that facilitators should be continually seeking opportunities to achieve program goals, implement the leadership training modules, follow program principles, and reinforce the Seven Grandfather Teachings.
9. **Mentoring & Role Modeling** – occurs naturally through daily interactions between leaders and the youth. The OALE immersion experience presents an exceptional opportunity for facilitators to fulfill the role of mentor or role model for the youth through the provision of ongoing feedback, encouragement, and support. The youth are also encouraged to identify other positive role models and mentors from outside the program, and share publicly how these individuals *have* and *will* influence them beyond the OALE.
10. **Cultural Learning** – is embedded throughout the entire immersion experience creating opportunities to observe, participate, or engage in specific experiences. The OALE includes cultural ceremonies (e.g. smudge), traditions (e.g. prayer, offering tobacco), and specific learning opportunities (history, language, naming, crafts, experiences). Other cultural learning experiences are planned through structured programming, and also encouraged through seeking unique ad-hoc opportunities (e.g. cultural teaching during a talking circle).
11. **Community-Mindedness** – creates an atmosphere where relationships are strengthened within the travel group, and also encouraged to extend beyond to include the home community. The OALE presents opportunities for the youth to develop friendships, networks of support (with leaders), and a conviction for making their community a better place to live.
12. **Holistic Healthy Living** – integrates the physical, mental, emotional, and spiritual dimensions of health and well-being. There are numerous opportunities for integration

and implementation of this principle through physical activity and mental resilience during the challenges of daily travel, nutrition at meals, emotional re-regulation during solos, spirituality during cultural ceremonies, social interaction, appreciation for nature, and community-mindedness. The OALE creates a powerful model (and metaphor) for unique ideas and ways for the youth to practice holistic healthy living, which helps set the stage for enhanced well-being.

13. **Positive Reinforcement** – creates an environment where leaders are constantly *catching the youth doing things right*. The OALE is designed so that there are numerous opportunities for leaders to encourage the youth as they accomplish many small tasks, succeed at completing challenges, and overcome obstacles. Positive reinforcement is a hallmark for building self-confidence, and sets the stage for fostering resilience.
14. **Celebrating & Recognizing Success** – reinforces the importance of leadership, perseverance, and the significance of community support in attaining a goal. The OALE ends with a community celebration to recognize individual and group success, and to allow friends and family to share in the significance of the experience. This aids in the transfer of learning and personal growth back to the home environment. Individuals also participate in a simple individualized ceremony where they are publicly awarded certificates that provide formal recognition of their accomplishment.
15. **Positive Feedback** – supplies each youth with specific information about their own personal strengths, gifts, and talents that will be personal resources to sustain them in life. Using both group and one-on-one formats near the end of the OALE, leaders provide positive feedback to the youth so that they understand their own unique abilities, areas of improvement, capacities for leadership, and potential for life success.
16. **Accessing Resources** – prepares the youth to identify specific people and places to go in their community so they can obtain help, learn more, and realize their dreams. The OALE introduces the youth to many concepts, teachings and experiences that stimulate the need to identify supportive resources that they can access after the experience is over. Accessing resources is critical for the youth to maintain positive changes over time.
17. **Elder Support** – extends and deepens the impact of the OALE program through strategic Elder involvement before, during, and after the program. Elders are involved during departure and arrival ceremonies, and an Elder visit and teaching occurs at about the halfway point in the journey. Elders are resourced for their knowledge, and their support also signifies that the OALE program is seamlessly integrated and supported within the community.
18. **Creating Connections** – allows the unique characteristics of the OALE to be strengthened through linkages that the youth make with Self and Creation. Connections with Self are encouraged through reflection activities (journaling, talking circles, solo experience), and connections with Creation are strengthened through the facilitation of activities and the art of mentoring in the moment. In other words, through specific experiential activities and teachable moments, youth are encouraged to connect with other youth, family, community, nature, and the Creator.

Implementation Phases

The four implementation phases identify four distinct components to the OALE process. The reason they are described separately as phases is to help staff think and prepare the different characteristics of each phase and hence the different implementation strategies and facilitation techniques required.

Phase 1 (1 day) is very procedural and focused on ensuring that youth and leaders are prepared for the experience in terms of equipment, food, and logistics. The three program goals are also introduced in Phase 1, and preliminary efforts endeavour to increase individual comfort level, and build group cohesion through games and initiative tasks. Youth are issued journals in Phase 1 so they can record the program goals, protocols and then bring the journal along for daily reflections throughout the experience.

Phase 2 (8-10 days) is the heart of the OALE and it includes principles, themes, and daily routines. It is described in further detail on the following pages; however since it is the heart or essence of the OALE, it is important to realize some of the characteristic changes that occur over time. Typically most youth are anxious and nervous during the first two travel days. Individuals in each travel group often do not know each other very well, daily routines are not established, and often outdoor living and travel skills are not yet developed. Some youth may even display dislike and regret that they chose to participate. Facilitators focus on being patient, developing relationships with each youth, and seeking for ways to make the group more cohesive. Pre-trip route planning is also critical to ensure that the travel distance and natural challenges are easier and more manageable during the first few days. On past excursions, there has been a *day three phenomena*, where a number of youth seem to have an attitude change and begin accepting and enjoying their experience sometime on the third or fourth day. This change can be gradual or rather abrupt, stimulated by a particular experience or realization. Often the travel group becomes more communal and cohesive during this period, and the change seems to still occur (and may be even be enhanced) even when there are challenges and difficulties encountered such as wind, rain, rapids, or portages. Although it is called the *day three phenomena*, the change may or may not be that noticeable, and it may occur on slightly different days (2-5).

Phase 3 (1 day) describes an important transition period in the experience. When the youth arrive home after an intensive 10-day experience they will be greeted by friends and family at a community feast. They will likely have a mix of powerful emotions, thoughts, and resolve. Staff provide the youth with the space and time to celebrate their success and share their stories with friends and family. A short ceremony provides public recognition of their accomplishments.

Phase 4 (12+ months) identifies one of the most challenging aspects of an intensive short-term intervention such as the OALE. The challenge is to maintain or sustain any progress the youth have made towards the three goals through ongoing support and program implementation at the Waasa Naabin Youth Services Centre. Some youth who demonstrate particular aptitude and appreciation of their experience may be encouraged to return the following year as an assistant or staff member.

Daily Themes

Introducing daily themes during each day of the Phase 2 excursion helps provide further structure and delineation to the phased approach. Daily themes help staff provide structure for ensuring that progress is made towards the three OALE program goals. They also help refine and reflect the content contained in the six leadership training modules. The following daily themes are listed chronologically; however they represent a menu of possible themes for use on a particular travel day. In perfect conditions (weather) and under ideal circumstances, trip leaders and facilitators may be able to implement all of these themes; however they are presented here as a menu of choices. For instance, it may be more appropriate to introduce a “Daily Theme” on a particular day that may be out of the order presented here, and it may not be possible to introduce and facilitate all of these themes. Many of these themes may be learned or realized without introduction or facilitation since they are implicit within the experience; however a realistic goal for staff would be to indirectly introduce at least five or six of the themes in order to make the learning more explicit. To introduce a theme, a staff facilitator introduces the theme and “key question” early in the morning (perhaps at breakfast, immediately before departure from camp, or on the water with all the canoes in a group). The youth are then able to reflect on the question(s) throughout the day and may make personal journal entries whenever appropriate at breaks, lunch, camp, or during a debrief at the end of the day. Staff facilitators also reinforce the themes throughout the day by reminding the youth of the theme, the question, and the expectation of reflecting and responding to the question in the youths’ personal journals. At an appropriate point in the day (usually in the evening), facilitating an experiential activity may also help to reinforce the theme further.

- 1. Theme – The Journey Begins: Where did I come from?**
— Connecting to Aboriginal roots & culture
How does my Aboriginal heritage and culture influence me, my convictions, and my identity?
- 2. Theme – The Seven Grandfathers: What do these gifts mean to me?**
— Appreciating the Grandfather teachings
How do these teachings help me develop as a leader?
- 3. Theme – Personal Identity: Who Am I?**
— Realizing personal values, strengths, & weaknesses
What are my personal values, gifts and strengths? What is my personal mission statement?
- 4. Theme – The Dream: Where am I going?**
— Identifying personal vision & dreams
What do I really want to accomplish in my life? What are my dreams? What is my personal vision statement?
- 5. Theme – Relationships: Who are my role models?**
— Recognizing important relationships & role models
Who are my role models both within the community and without? Who are the individuals that will be able to most help me realize my dream and achieve my vision? What are my roles?
- 6. Theme – Community: Where can I make a difference?**
— Developing community-mindedness & civic responsibility

Where can I make the most difference in my community? In what areas do I most want to serve? What's holding me back from committing and serving?

7. Theme – Connection and Reflection: What have I learned about SELF and CREATION?

— Evaluating personal experience and program effectiveness

What was my most important metaphoric experience that will help me transform my life in the future? In what ways was the program effective, and in what ways can it be improved?

8. Theme – The Journey Ends and Really Begins: What is your life journey?

— Translating experience to life beyond

How is this canoe journey on the French River, Georgian Bay, Lake Huron and arriving at Wikwemikong similar to my personal leadership development journey?

Daily Routine & Responsibilities

The OALE program is conducted almost entirely during a wilderness excursion, and the programming is enhanced through establishing routines and responsibilities each day. Providing some structure and discipline for the youth encourages personal growth, but adequate time must be provided for downtime, reflection and spontaneous fun! Hence, a detailed schedule of daily events for the OALE is not warranted. However, the following concepts are considered and implemented for each OALE group in a manner that best reflects environmental conditions, the abilities of the staff, and the characteristics of the participants and group. These routines and responsibilities also provide the youth with the structure they need to support any personal changes that may occur.

Day Leadership – Youth are responsible to lead the entire travel group for a period (minimum half day but full day or longer is preferable). Leadership may occur individually, in pairs, or as a small group, depending on maturity and interest. Leaders are encouraged to use their gifts and resources (equipment & other people around them). Staff intentionally seek opportunities to provide positive reinforcement for youth that take initiative, make decisions, and/or get things done (i.e. display leadership).

Day Themes – See aforementioned section for details on each theme and how they are facilitated and reinforce the themes during each travel day.

Duty Roster – Youth are divided into teams to complete daily duties on a rotation basis. Duties could include: Kitchen (cooking/cleaning at meals); Fire (making fire/cleaning camp before bed); Tents & Tarp (set-up tents & tarp); Leadership (hold leadership role for the day). Preparing a duty roster in advance clarifies expectations, reduces the delegation burden on day leaders, and fosters more time and focus on other important program components.

Ceremony & Discipline – Staff are encouraged to introduce ceremonial practices such as offering tobacco at the start of each travel day and taking turns saying prayers to the Creator before meals. Establishing a disciplined routine such as eating together at meal time reinforces culture and highlights important traditions and practices that further help the youth cultivate their identity.

Metaphoric Stories & Experiential Activities - Given the principles of experiential education and metaphoric learning that guide the OALE, staff continually seek ways to use experiential activities and metaphors to reinforce daily themes, Grandfather Teachings, and other teachable moments that may support the three OALE program goals.

Evening Talking Circle - Each evening at the end of the travel day, staff are encouraged to establish a *talking circle*, *check-in*, or *debrief*. In its simplest form, the talking circle is an unrehearsed way to allow each youth an opportunity to both hear and share learnings and teachings they may have received during the day. It is also an opportunity for staff to highlight themes, learnings, teachable moments, and provide public recognition of both individual and group accomplishments, or progress towards goals.

Alone Time – Youth are given opportunities to spend some time alone each day. Staff encourage and preserve this alone time so the youth can connect with the Creator, write in their journal, wander through the forest (close proximity to camp), or simply sit and relax in nature away from others in the group. Staff often suggest specific routines or activities that could make this alone time more interesting. Traveling and living in close proximity can also sometimes result in the need to be alone for some youth, so this daily routine supports that need as well.

Seven Grandfather Teachings

The seven teachings are from the Seven Grandfathers, and are gifts from the Creator. They reflect personal well-being and living in harmony within a community and with nature. They are foundational teachings for the OALE program and are being taught, modeled by leaders, and reinforced (noticed) in the youth participants whenever possible. The following Seven Grandfather Teachings are based on the Anishnabemowin tradition.

1. **Nbwaakaawin** - To cherish knowledge is to know wisdom
2. **Zaagidwin** - To know love is to know peace
3. **Minaadendiwin** - To honour all of the creation is to have respect
4. **Aakde'win** - Bravery is to face foe with integrity
5. **Gwekwaadziwin** - Honesty in facing a situation is to be brave
6. **Dbaadendiswin** - Humility is to know yourself as a sacred part of the creation
7. **Debwewin** - Truth is to know of these things

OALE Video

The Journey Home: The Outdoor Adventure Leadership Experience is a 12-minute film documentary, directed by Dr. Hoi Cheu from the Laurentian Film Studio. The film uses imagery and multiple viewpoints to highlight the impact of the OALE program on the resilience and well-being of Wikwemikong youth. Viewpoints include those of the youth themselves, a university researcher, the community Health Services Director, and Chief Hazel Fox-Recollet. The video was filmed almost entirely in one day, July 30, 2010, during the OALE arrival ceremony in Wikwemikong near the completion of the 10-day experience. Visually, the Journey Home vividly displays the reality of youths' experiences during phase three of the experience. It is essentially a homecoming story that portrays the passion and impact of the OALE program as the youth arrive and are greeted by their friends and family. It is available for viewing online at:

www.oalevideo.laurentian.ca.

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Appendix G: Health and Well-Being Questionnaire (HWBQ)



HEALTH & WELL-BEING QUESTIONNAIRE – FOLLOW-UP

Date: _____ Identification Number: _____
DD / MM / YY

THERE ARE 4 PARTS TO THIS QUESTIONNAIRE (PART A, B, C, D)

PART A

Please respond to the following questions to the best of your ability.

1. Are you an Aboriginal person, that is, North American Indian, Métis or Inuk?

<input type="radio"/> Yes, North American Indian	<input type="radio"/> No, Non-Aboriginal
<input type="radio"/> Yes, Métis	<input type="radio"/> Don't know
<input type="radio"/> Yes, Inuk (Inuit)	
2. In the past year, how many months did you live on a reserve?
_____ (Answer from 0 to 12 months)
3. Which of the following best describes your current living situation? I live with:

<input type="radio"/> Both parents	<input type="radio"/> Relatives
<input type="radio"/> My mother only	<input type="radio"/> Friends
<input type="radio"/> My father only	<input type="radio"/> Brothers & sisters
<input type="radio"/> Foster parent(s)	<input type="radio"/> Other: _____
4. Compared to other families in your home community, is your family:

<input type="radio"/> Poorer than most
<input type="radio"/> About average
<input type="radio"/> Richer than most
5. Compared with your classmates, how well do you do in school?

<input type="radio"/> Much below average
<input type="radio"/> Below average
<input type="radio"/> Average
<input type="radio"/> Above average
<input type="radio"/> Much above average
<input type="radio"/> Do not attend school

Please read the following statements. To the right of each you will find seven numbers, ranging from "1" (Strongly Disagree) on the left to "7" (Strongly Agree) on the right. Circle the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, circle "1". If you are neutral, circle "4", and if you strongly agree, circle "7", etc.

	Strongly Disagree				Strongly Agree		
6. I usually manage one way or another.	1	2	3	4	5	6	7
7. I feel proud that I have accomplished things in life.	1	2	3	4	5	6	7
8. I don't let things upset me for long.	1	2	3	4	5	6	7
9. I am friends with myself.	1	2	3	4	5	6	7
10. I feel that I can handle many things at a time.	1	2	3	4	5	6	7
11. I am determined.	1	2	3	4	5	6	7
12. I can get through difficult times because I've experienced difficulty before.	1	2	3	4	5	6	7
13. I have self-discipline.	1	2	3	4	5	6	7
14. I keep interested in things.	1	2	3	4	5	6	7
15. I can usually find something to laugh about.	1	2	3	4	5	6	7
16. My belief in myself gets me through hard times.	1	2	3	4	5	6	7
17. In an emergency, I'm someone people can generally rely on.	1	2	3	4	5	6	7
18. My life has meaning.	1	2	3	4	5	6	7
19. When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7

20. In general, would you say your **mental** health is:

- ☐ excellent
- ☐ very good
- ☐ good
- ☐ fair
- ☐ poor?

PART B

This part asks for your views about your health. This information will help you keep track of how you feel and how well you are able to do your usual activities.

For each of the following questions, please mark the circle that best describes your answer.

1. In general, would you say your health is:

Excellent
☐

Very good
☐

Good
☐

Fair
☐

Poor
☐

2. The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

	Yes, limited a lot	Yes, limited a little	No, not limited at all
a. <u>Moderate Activities</u> , such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Climbing <u>several</u> flights of stairs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. <u>Accomplished less</u> than you would like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Were limited in the kind of work or other activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. <u>Accomplished less than you would like</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Did work or activities less carefully than usual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

Not at all	A little bit	Moderately	Quite a bit	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 weeks...

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. Have you felt calm and peaceful?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Did you have a lot of energy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Have you felt downhearted and depressed?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PART C

Please think about what you have been doing and experiencing during the past four weeks, then report how much you experienced each of the following feelings, using the scale below.

	Very Rarely or Never	Rarely	Some- times	Often	Very Often or Always
1. Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Negative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Sad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Joyful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Angry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Contented	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The next few questions are about spiritual, cultural and community values in your life. Indicate your most appropriate response to each question.

	Not at all	A little	Some	A lot
1. To what extent do your spiritual values help you to find meaning in your life?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. To what extent do your spiritual values give you the strength to face everyday difficulties?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. To what extent do your spiritual values help you to understand the difficulties of life?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Do spiritual values play an important role in your life?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Are you proud of your ethnic background?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Do you think it is important to serve your community?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Do you enjoy your family's traditions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Do you enjoy your community's traditions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next are some questions about social supports that are available to you. People sometimes look to others for companionship, assistance or other types of support. How often is each of the following kinds of support available to you if you need it:

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
1. ...someone you can count on to listen to you when you need to talk.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. ...someone you can count on when you need advice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. ...someone who shows you love and affection.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. ...someone to have a good time with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. ...someone to confide in or talk about yourself or your problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. ...someone to get together with for relaxation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. ...someone to do something enjoyable with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Now a series of statements that people might use to describe themselves. Please indicate if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. You feel that you have a number of good qualities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. You feel that you're a person of worth at least equal to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. You are able to do things as well as most other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. You take a positive attitude toward yourself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. On the whole you are satisfied with yourself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. All in all, you're inclined to feel you're a failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Below are some statements with which you may agree or disagree. Using the scale below, indicate your agreement with each item by indicating that response for each statement. Please be open and honest in your response.

	Strongly Disagree	Disagree	Slightly disagree	Mixed or neither agree nor disagree	Slightly agree	Agree	Strongly agree
1. I lead a purposeful and meaningful life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My social relationships are supportive and rewarding.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am engaged and interested in my daily activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I actively contribute to the happiness and well-being of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I am competent and capable in the activities that are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I am a good person and live a good life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I am optimistic about my future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. People respect me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1. In most ways, my life is close to my ideal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The conditions of my life are excellent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am satisfied with my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. So far, I have gotten the important things I want in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. If I could live my life over, I would change almost nothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PART D (Reflection)

Thinking back over the past twelve months, what were some of the significant events, decisions, or other factors that may have impacted your answers on this questionnaire (please use the back of this page if you require more space to write):

At home?

At school?

In the community?

Other?

In the past twelve months, is there anything else that occurred that you can think of that may have significantly impacted you mentally, physically, emotionally, spiritually (continue on back page if required)?

Thinking back to your participation in the outdoor adventure leadership experience in the summer of 2009, was that experience beneficial to you? Why or why not?

Can we contact you to discuss these questions with you further?

☐ Yes ☐ No

*****THIS IS THE END OF THE QUESTIONNAIRE***
THANK YOU!!!**

Appendix H: Source of Scales for HWBQ

Source of Scales for the Health and Well-Being Questionnaire (HWBQ)

Note: The following table comprises all of the sub-scales used in the HWBQ. Most of these scales are sourced from other independent scales or measurement instruments and this document summarizes the source of these scales. The following table indicates, the name of each scale and construct, # of questions (items), location (section and item #) in HWBQ, and the dimension of health assessed. The purpose of this document is to identify the source study and reference for every question item used in the HWBQ. This document was intended for internal use as a reference document in the early stages of the study.

Name of Scale	Code - # Questions	HWBQ - Q#	Dimension Assessed
Participant Identification	PI-1	Written Consent Form & HWBQ	Identification
Participant Variables	PV-5	Written Consent Form	Identification / Age / Sex
Ethnic Identity	EI-2	Part A: #1-2	Identification
Adolescent Determinants of Health	ADH-3	Part A: #3-5	Determinants of Health
General Mental Health	GMH-1	Part A: #20	Mental
Resilience Scale	RS-14	Part A: #6-19	Mental
Mental Component Summary Scale	SF12v2-MCS-6	Part B: #5,6,9,10	Mental
Physical Component Summary Scale	SF12v2-PCS-6	Part B: #1,3,4,7,8,11	Physical
Scale of Positive and Negative Experience	SPANE-12	Part C: #1-12	Emotional
Spiritual Values	SV-4	Part C: #13-16	Spiritual
Cultural & Community Values	CV-4	Part C: #17-20	Spiritual/Mental
Social Support	SS-7	Part C: #21-27	Emotional/Mental
Self-Esteem Scale	SES-6	Part C: #28-33	Mental
Flourishing Scale	FS-8	Part C: #34-41	Mental/Emotional
Satisfaction With Life Scale	SWL-5	Part C: #42-46	Mental/Emotional
Total Number of Items	78 – excluding PI-1 & PV-5		

Participant Variables (PV)

Note: The following questions appear on the Informed Consent Form to ensure participant confidentiality.

Identification Number: _____

First Name: Confidential - *Not Included in analysis*

Last Name: Confidential - *Not Included in analysis*

Sex (Male or Female): _____

Date of Birth (Age): _____

Participant Identification (PI)

1. Identification Number: _____

Note: Using only the identification number on the questionnaire ensures confidentiality of the data from each questionnaire, and yet makes it possible to identify the participants from the data on the consent or participation form. In some cases (post-test administration of questionnaire) the identification number was supplied (printed) on the questionnaire.

Ethnic Identity (EI)

Source: Statistics Canada. *Aboriginal Peoples Survey (APS), 2006*. Ottawa: Statistics Canada.

Public domain questions: permission not required.

1. Are you an Aboriginal person, that is, North American Indian, Métis or Inuk? (APS-Pt1-Q2)

Yes, North American Indian; Yes, Métis; Yes, Inuit; No, Non-aboriginal; Don't know

2. In the past year, how many months did you live on a reserve? (New question added; derived from APS, 2006)

_____ (Answer from 0 to 12 months)

Adolescent Determinants of Health (ADH)

Source: Parker, T. (2004). Factors associated with American Indian teens' self-rated health. *American Indian & Alaska Native Mental Health Research: The Journal of the National Center*, 11(3), 1-19. Voices of Indian Teens Survey (VOIT).

Public domain demographic questions: permission not required.

1. Which of the following best describes your current living situation? (New question added; derived from VOIT, 2004)
I live with:
both parents; my mother only; my father only; foster parent; relatives; friends;
other: _____
2. Compared with your classmates, how well do you do in school? (VOIT-academc1)
Much below average; Below average; Average; Above average; Much above average; *Do not attend school (new selection added - not in VOIT)*
3. Compared to other families in your home community, is your family: (VOIT-famres1)
Poorer than most; About average; Richer than most

General Health (GMH)

Source: Statistics Canada (2007). *Canadian Community Health Survey, Cycle 4.1 - 2007 Questionnaire*. Ottawa: Statistics Canada.

Public domain standard health question: permission not required.

Stem: This survey deals with various aspects of your health. I'll be asking about such things as physical activity, social relationships and health status. By health, we mean not only the absence of disease or injury but also physical, mental and social well-being. (optional transition statement from CCHS Cycle 4.1, 2007)

1. In general, would you say your mental health is: (CCHS4.1-GEN_Q02B)
1 ... excellent?; 2 ... very good?; 3 ... good?; 4 ... fair?; 5 ... poor?

In general, would you say your health is: (CCHS4.1-GEN_Q01 / ABS-Pt2-QE1 / SF-36v2-Q1)

1 ... excellent?; 2 ... very good?; 3 ... good?; 4 ... fair?; 5 ... poor?

Note: This same question (above) is part of the SF-12v2 so it need not be repeated in this section.

The 14-Item Resilience Scale™ (RS)

Source: Wagnild, G M. The Resilience Scale user's guide for the US English version of the Resilience Scale and the 14-item Resilience Scale. Worden, MT: The Resilience Center 2009.

Use granted with permission given from Gail Wagnild on April 8, 2009. Permission also granted to modify question #4 to read: "I don't let things upset me for long."

Note: The following format appears as it was received in its original form by Wagnild & Young. More information is now available at <http://www.resiliencescale.com/>

Date _____

Please read the following statements. To the right of each you will find seven numbers, ranging from "1" (Strongly Disagree) on the left to "7" (Strongly Agree) on the right. Circle the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, circle "1". If you are neutral, circle "4", and if you strongly agree, circle "7", etc.

Circle the number in the appropriate column	Strongly Disagree				Strongly Agree			
1. I usually manage one way or another.	1	2	3	4	5	6	7	
2. I feel proud that I have accomplished things in life.	1	2	3	4	5	6	7	
3. I usually take things in stride.	1	2	3	4	5	6	7	
4. I am friends with myself.	1	2	3	4	5	6	7	
5. I feel that I can handle many things at a time.	1	2	3	4	5	6	7	
6. I am determined.	1	2	3	4	5	6	7	
7. I can get through difficult times because I've experienced difficulty before.	1	2	3	4	5	6	7	
8. I have self-discipline.	1	2	3	4	5	6	7	
9. I keep interested in things.	1	2	3	4	5	6	7	
10. I can usually find something to laugh about.	1	2	3	4	5	6	7	
11. My belief in myself gets me through hard times.	1	2	3	4	5	6	7	
12. In an emergency, I'm someone people can generally rely on.	1	2	3	4	5	6	7	
13. My life has meaning.	1	2	3	4	5	6	7	
14. When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7	

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SF-12v2[®] Health Survey Standard Version (SF-12v2[®])

Source: Ware JE Jr., Kosinski M, Turner-Bowker DM, Gandek B. *User's Manual for the SF-12v2[®] Health Survey With a Supplement Documenting SF-12[®] Health Survey*. Lincoln, RI: QualityMetric Incorporated 2002.

Use granted with purchase of license. Our SF-12v2 license number: CT114079 / OP000119.

This part asks for your views about your health. This information will help you keep track of how you feel and how well you are able to do your usual activities.

For each of the following questions, please mark the circle that best describes your answer.

8. In general, would you say your health is:

Excellent	Very good	Good	Fair	Poor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

	Yes, limited a lot	Yes, limited a little	No, not limited at all
c. <u>Moderate Activities</u> , such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Climbing <u>several</u> flights of stairs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
c. <u>Accomplished less</u> than you would like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Were limited in the kind of work or other activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
c. <u>Accomplished less than you would like</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Did work or activities less carefully than usual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

Not at all	A little bit	Moderately	Quite a bit	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 weeks...

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
d. Have you felt calm and peaceful?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Did you have a lot of energy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Have you felt downhearted and depressed?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Scale of Positive and Negative Experience (SPANE)

© Copyright by Ed Diener and Robert Biswas-Diener, January 2009.

Source: Diener E, Wirtz D, Tov W, Kim-Prieto C, Choi D-W, Oishi S, Biswas-Diener R. New well-being measures: short scales to assess flourishing and positive and negative feelings. *Social Indicators Research* 2010; **97(2)**: 143-156. doi: 10.1007/s11205-009-9493-y.

Use granted without permission required.

Stem: Please think about what you have been doing and experiencing during the past four weeks. Then report how much you experienced each of the following feelings, using the scale below. For each item, select a number from 1 to 5, and indicate that number on your response sheet.

1. Very Rarely or Never
2. Rarely
3. Sometimes
4. Often
5. Very Often or Always

Positive
Negative
Good
Bad
Pleasant
Unpleasant
Happy
Sad
Afraid
Joyful
Angry
Contented

Scoring: The measure can be used to derive an overall affect balance score, but can also be divided into positive and negative feelings scales, and can be divided even further into general and specific feelings.

Positive Feelings (SPANE-P): Add the scores, varying from 1 to 5, for the six items: positive, good, pleasant, happy, joyful, and contented. The score can vary from 6 (lowest possible) to 30 (highest positive feelings score).

Negative Feelings (SPANE-N): Add the scores, varying from 1 to 5, for the six items: negative, bad, unpleasant, sad, afraid, and angry. The score can vary from 6 (lowest possible) to 30 (highest negative feelings score).

Affect Balance (SPANE-B): The negative feelings score is subtracted from the positive feelings score, and the resultant difference can vary from -24 (unhappiest possible) to 24 (highest affect balance possible). A respondent with a very high score of 24 reports that she or he rarely or never has any of the negative feelings, and very often or always has all of the positive feelings.

Spiritual Values (SV)

Source: Statistics Canada (2007). *Canadian Community Health Survey, Cycle 4.1 - 2007 Questionnaire*. Ottawa: Statistics Canada.

Public domain questions: Use granted without permission required.

Note: Questions were adapted from the following sources:

- Quebec Health and Social Survey (1998).
- Religion Module of the Ethnic Diversity Survey (Statistics Canada)
- WHOQOL - 100 (World Health Organization Quality of Life survey. Field Trial, 1995)
- They were first included in CCHS Cycle 1.1 (optional) and 1.2.

*Based on personal correspondence by e-mail on February 23, 2009 from Catherine Dick, Statistics Canada / 150 Tunney's Pasture Driveway, Ottawa ON K1A 0T6
Catherine.Dick@statcan.gc.ca Telephone / Téléphone 613-951-1653*

Stem: I now have a few questions about spiritual values in your life.

- e. To what extent do your spiritual values help you to find meaning in your life? (CCHS4.1-SPR_Q2)
1 A lot; 2 Some; 3 A little; 4 Not at all
- f. To what extent do your spiritual values give you the strength to face everyday difficulties? (CCHS4.1-SPR_Q3)
1 A lot; 2 Some; 3 A little; 4 Not at all
- g. To what extent do your spiritual values help you to understand the difficulties of life? (CCHS4.1-SPR_Q4)
1 A lot; 2 Some; 3 A little; 4 Not at all
- h. Do spiritual values play an important role in your life? (CCHS4.1-SPR_Q1)
1 A lot; 2 Some; 3 A little; 4 Not at all

Cultural & Community Values (CCV)

Source: Ungar M, Liebenberg L. Assessing resilience across cultures using mixed methods: Construction of the Child and Youth Resilience Measure. *Journal of Mixed Methods Research* 2011; **5(2)**: 126-149. Questions below are individual items from an earlier version of the CYRM-28.

Stem: To what extent do the statements below DESCRIBE YOU? Circle one answer for each statement.

- 1. Are you proud of your ethnic background? (CYRM-28-Q10)
Not at All; A Little; Some-what; Quite a Bit; A Lot
- 2. Do you think it is important to serve your community? (CYRM-28-Q23)
Not at All; A Little; Some-what; Quite a Bit; A Lot
- 3. Do you enjoy your family's traditions? (CYRM-28-Q26)
Not at All; A Little; Some-what; Quite a Bit; A Lot
- 4. Do you enjoy your community's traditions? (CYRM-27-Q9)
Not at All; A Little; Some-what; Quite a Bit; A Lot

Social Support Scale (SSS)

Source: Statistics Canada. 2006. *Aboriginal Peoples Survey, 2006*. Ottawa: Statistics Canada; and Statistics Canada (2007). *Canadian Community Health Survey, Cycle 4.1 - 2007 Questionnaire*. Ottawa: Statistics Canada.

Scale questions available in public domain from rand.org: Use granted without permission required. These questions are not the complete scale, but selected items only.

Original Source: Survey originally adapted from Sherbourne, C.D. and A.L. Stewart, "The MOS Support Survey" (Medical Outcomes Study Social Support Survey), *Social Sciences & Medicine*; 32: 705 – 714; more information available at

http://rand.org/health/surveys_tools/mos/mos_socialsupport.html

Stem: Next are some questions about social supports that are available to you (optional transition statement from APS, 2006). People sometimes look to others for companionship, assistance or other types of support. How often is each of the following kinds of support available to you if you need it:

1. ...someone you can count on to listen to you when you need to talk. (APS-Pt2-QE52a / CCHS4.1-SSA_Q03)
5=All of the time; 4=Most of the time; 3=Some of the time; 2=A little of the time;
1=None of the time
2. ...someone you can count on when you need advice. (APS-Pt2-QE52b / CCHS4.1-SSA_Q04)
5=All of the time; 4=Most of the time; 3=Some of the time; 2=A little of the time;
1=None of the time
3. ...someone who shows you love and affection. (APS-Pt2-QE52d / CCHS4.1-SSA_Q06)
5=All of the time; 4=Most of the time; 3=Some of the time; 2=A little of the time;
1=None of the time
4. ...someone to have a good time with. (APS- Pt2-QE52e / CCHS4.1-SSA_Q07)
5=All of the time; 4=Most of the time; 3=Some of the time; 2=A little of the time;
1=None of the time
5. ...someone to confide in or talk about yourself or your problems. (APS- Pt2-QE52g / CCHS4.1-SSA_Q09)
5=All of the time; 4=Most of the time; 3=Some of the time; 2=A little of the time;
1=None of the time
6. ...someone to get together with for relaxation. (APS- Pt2-QE52h / CCHS4.1-SSA_Q14)
5=All of the time; 4=Most of the time; 3=Some of the time; 2=A little of the time;
1=None of the time
7. ...someone to do something enjoyable with. (APS- Pt2-QE52i / CCHS4.1-SSA_Q18)
5=All of the time; 4=Most of the time; 3=Some of the time; 2=A little of the time;
1=None of the time

Self-esteem Scale (SES)

Source: Statistics Canada (2007). *Canadian Community Health Survey, Cycle 4.1 - 2007 Questionnaire*. Ottawa: Statistics Canada

Use granted without permission required.

Original Source: Rosenberg, M. *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press, 1965. On the CCHS, the six items have been factored into one dimension in the factor analysis done by Pearlin and Schooler (1978). The structure of coping. *Journal of Health and Social Behavior* 1978; **19**(1): 2-21.

Stem: Now a series of statements that people might use to describe themselves. Please tell me if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree.

1. You feel that you have a number of good qualities. (CCHS4.1-SFE_Q501)
1 Strongly agree; 2 Agree; 3 Neither agree nor disagree; 4 Disagree; 5 Strongly disagree
2. You feel that you're a person of worth at least equal to others. (CCHS4.1-SFE_Q502)
1 Strongly agree; 2 Agree; 3 Neither agree nor disagree; 4 Disagree; 5 Strongly disagree
3. You are able to do things as well as most other people. (CCHS4.1-SFE_Q503)
1 Strongly agree; 2 Agree; 3 Neither agree nor disagree; 4 Disagree; 5 Strongly disagree
4. You take a positive attitude toward yourself. (CCHS4.1-SFE_Q504)
1 Strongly agree; 2 Agree; 3 Neither agree nor disagree; 4 Disagree; 5 Strongly disagree
5. On the whole you are satisfied with yourself. (CCHS4.1-SFE_Q505)
1 Strongly agree; 2 Agree; 3 Neither agree nor disagree; 4 Disagree; 5 Strongly disagree
6. All in all, you're inclined to feel you're a failure. (CCHS4.1-SFE_Q506)
1 Strongly agree; 2 Agree; 3 Neither agree nor disagree; 4 Disagree; 5 Strongly disagree

Flourishing Scale (FS)

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Source: Diener E, Wirtz D, Tov W, Kim-Prieto C, Choi D.-W., Oishi S, Biswas-Diener R.. New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research* 2010; **97(2)**: 143-156. doi: 10.1007/s11205-009-9493-y

Use granted without permission required.

Stem: Below are 8 statements with which you may agree or disagree. Using the 1 – 7 scale below, indicate your agreement with each item by indicating that response for each statement.

- 7 Strongly agree
- 6 Agree
- 5 Slightly agree
- 4 Mixed or neither agree nor disagree
- 3 Slightly disagree
- 2 Disagree
- 1 Strongly disagree

I lead a purposeful and meaningful life.
My social relationships are supportive and rewarding.
I am engaged and interested in my daily activities
I actively contribute to the happiness and well-being of others
I am competent and capable in the activities that are important to me
I am a good person and live a good life
I am optimistic about my future
People respect me

Scoring: Add the responses, varying from 1 to 7, for all eight items. The possible range of scores is from 8 (lowest possible) to 56 (highest PWB possible). A high score represents a person with many psychological resources and strengths.

Satisfaction With Life Scale (SWLS)

Source: Diener E, Emmons R A, Larsen R J, Griffin S. The satisfaction with life scale. *Journal of Personality and Assessment* 1985; **49(1)**: 71-75.

Use granted without permission.

Stem: Below are five statements with which you may agree or disagree. Using the scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your response.

- 7 Strongly agree
- 6 Agree
- 5 Slightly agree
- 4 Neither agree nor disagree
- 3 Slightly disagree
- 2 Disagree
- 1 Strongly disagree

- _____ In most ways, my life is close to my ideal.
- _____ The conditions of my life are excellent.
- _____ I am satisfied with my life.
- _____ So far, I have gotten the important things I want in life.
- _____ If I could live my life over, I would change almost nothing.

Appendix I: Qualitative Data Collection Guide – Phase 3

QUALITATIVE DATA COLLECTION GUIDE – Phase 3

PROCESS AND QUESTIONS FOR TALKING CIRCLES, INTERVIEWS, AND JOURNALS DURING OALE TRIPS (IN THE FIELD, SUMMER 2009)

Talking Circle (on-trip)

Record at least one evening talking circle on each trip without any pre-planned research related questions.

During Trip (sometime during last third of the trip, as close to the last day as possible)

Prior to posing questions below, the group atmosphere will be established by the facilitator with a short game, story, campfire, or any combination of the above. This talking circle will be purposefully administered before (or at a different time from) any other programming activity related to the intervention (i.e. thematic activity, daily debrief, exercise from leadership manual, etc.) so that context and responses will not be unduly influenced by the content of a specific intervention exercise. An attempt will be made to conduct this debrief at least once when the two travel groups are together at the same campsite, preferably on the last night before arrival in Prairie Point.

1. “Now that you are on the trip (or near the end of the trip), are you pleased that you decided to participate?” (purposefully closed-ended – proceed around circle for individual responses prior to next question)
2. “Now, describe why you are pleased or displeased about your decision?”
3. “Did this experience change you in any way?” (purposefully closed-ended – proceed around circle for individual responses before proceeding to next question)
4. “How did this experience change you?”
5. “What else did you learn from this experience?”
6. “What did you learn about leadership?”
7. “How is this experience changing what you feel and think about yourself? The group you are travelling with? Your community back home?”
8. “Considering the holistic view of wellness encompassing the physical, mental, emotional and spiritual, describe how this experience impacted your resilience and well-being?” (resilience may need to be defined first as the “ability to successfully cope with change or misfortune [or hardship]” – Wagnild, 2009)

Individual Key Informant Interviews

Phase 3 should include individual conversational interviews with at least one male and female participant on each of at least 4 trips. The question set used in these interviews will be similar to the questions below, but may include additional probe questions. Interviews with some staff leaders will also follow these same questions, as a third party reference to the youth participant perspectives.

1. “Did you learn anything from this experience?” (purposefully closed-ended)
2. “If yes, describe it?” “If no, why do you think that is?”
3. “What did you learn about leadership?”
4. “Is this experience changing you in any way?” (purposefully closed-ended)
5. “How or why not?”
6. “Considering the holistic view of wellness encompassing the physical, mental, emotional and spiritual, describe how this experience impacted your well-being?”

Daily Journal Questions (for participants)

The priority is to address the theme question for the day, however the following questions will be optional journal questions for each participant to respond to each day.

1. “What did you learn about leadership today?”
2. “What did you learn or think about your culture and heritage today”?
3. “What did you learn about resilience & well-being today”?
4. “What else did you learn about yourself today?”

Appendix J: Paper #6 - Reflections on Connecting Through Outdoor Adventure

Stephen D. Ritchie, Danielle G. Brinkman, Mary Jo Wabano, Nancy L. Young

Reprinted with Permission:

Ritchie SD, Brinkman DG, Wabano MJ, Young NL. Reflections on connecting through outdoor adventure. *Pathways: The Ontario Journal of Outdoor Education* 2011; **23(4)**: 4-9.

Context for the Article:

The article in this appendix is the sixth and last integrated article of the thesis, and it represents a reflexive examination of how the OALE research process impacted the principal investigator and one of his research assistants.

Connecting through outdoor adventure is a process that may or may not seem obvious. For us, the word “*connecting*” resonates with a powerful and extensive implied meaning that we feel compelled to share. A recent collaborative research project between leaders from Wikwemikong Unceded Indian Reserve and researchers from Laurentian University helped to uncover, or perhaps rediscover, that meaning through a series of outdoor adventure leadership experiences (OALE) designed for youth from this Northeastern Ontario First Nations community. [1]

Wikwemikong is a large reserve (by population) located at the eastern end of Manitoulin Island in Georgian Bay. The OALE involved a 10-day wilderness canoe excursion homeward through the traditional territory of the Wikwemikong community. The route followed the historic French River and then along the north shore of Georgian Bay towards Killarney and then across the channel to Manitoulin Island. Over two summers nearly 15% (n=73) of the on-reserve population of youth who were between 12 and 18 years of age completed the program.

Research data was collected via participant interviews, journals, and talking circles during the 2009 summer season. This data was analyzed to assess how the OALE may have affected resilience and well-being for the youth. Through the analysis, the data revealed insights into the process of outdoor adventure during the OALE. For over a year, we reviewed the data collaboratively at numerous meetings (member checks) and through guidance from community leaders and Elders. We also co-analyzed the data with the staff who were responsible for leading and facilitating the OALE program.

Connecting was the salient theme that emerged from a preliminary analysis of the data, and it has crystallized into a rich concept that we are still trying to understand more fully. The youth seemed to connect or deepen their connection with *self* and *creation* through their involvement in the OALE program. To clarify, the OALE functioned as both a process of self-discovery

(connecting to self) and a medium for global awareness of nature, people, and the created world (connecting to creation).

Connecting is a broad concept that, for many of the youth, is active and inclusive of the interconnected experiences and introspection that combine to form a pathway towards resilience and well-being. The concept of connecting could also be described as re-connecting or awakening. In other words, perhaps many of the connections were already there, but not necessarily noticed or realized until the experience for a particular youth reached a threshold level, where the connections became apparent. One of the youth described the process of connecting, as it seemed to reach this threshold early in the experience:

On Day 3, I told myself that I was going to be here for seven more days. I have to do what I have got to do. So I started thinking more positive about the trip. I remembered how my mom wanted me to learn my inner strengths. So I thought about my mom and she is my inspiration. I was thinking that if I wanted to go home, what would she think about it? So just thinking about that put me in a better mood. I made myself be happy and it was a nice day outside. So I bathed in the water. I felt clean and fresh. I had a whole new attitude. After I woke up, I changed, put the tents away, and cleaned up a lot. I remember the canoe ride and we went through a bunch of rapids. We fell in the water, got wet, and went through a bunch of storms. It was hot, it was cold, and we got some rain. After all that, I thought “wow, this is canoeing”. I enjoyed it. I loved it. (Female OALE participant, 15 years, Summer 2009)

Recently a Wikwemikong Elder reflected on the comments from this youth and the impact the OALE may have had for her and the other youth participants. She described the OALE process as a beginning, or an *eye-opener* for the youth, and that the *hearts of the youth had been opened*. She used the analogy of the youth as representing the seeds of a flower that begins to bud and bloom, as the youth connected with their inner strengths and began to see more clearly their place

in the world around them. From her perspective, connecting is primarily a spiritual process. Her words are a poignant reminder of the impact outdoor experiences can have on all of us:

Many people speak about spirituality. Spirituality is a way of life, and includes all of creation and the Creator. Connecting with creation is like watching a flower bloom. There must be someone making this possible. From a seed comes the stem, followed by leaves and a bud, which with time will become a beautiful flower. The seeds, that is the youth, are nurtured, cared for, and taught life's teachings. These teachings will help the youth lead a worthwhile and rewarding life. They are never alone. This is *Anishinaabe Bimaadiziwin*.

The Outdoor Adventure Leadership Experience [OALE] may only be the beginning, an eye-opener for the youth. Another way of saying it may be, that the hearts of the youth have been opened. The youth experienced an awakening, or an awareness of life and all that the Creator has given us. As one youth stated on his return from the trip, "I believe." That youth's belief may have been an awakening. What may have seemed impossible is made possible through positive support and guidance. Being spiritual is having an open heart to the abundance of grace that the Creator offers us, to be adventurous, to be courageous, and to be resilient. (Rita G. Corbiere, Wikwemikong Elder, former teacher and principal, December 22, 2010)

Clearly the concept of connecting is a complex interaction that extends beyond physical and mental health, evoking heightened emotions with spiritual implications. This is not surprising, given the teachings of the Medicine Wheel and the framework of health that is foundational to many Indigenous communities across Canada. [2] The Medicine Wheel, as a framework of holistic health and well-being, includes the four quadrants of mind, body, emotions, and spirit, and it is particularly relevant to the Anishinabek worldview in Wikwemikong. [3] The Medicine Wheel perspective captures the essence of a *sacred circle* and reflects the interrelatedness, interconnectedness and balance in a person's life; [4] it also includes a person's relationship with the health of the community and the entire natural world.

Many others have described similar concepts that are not that different from the teachings of the Medicine Wheel, and they could help us understand the connecting phenomena further. We present here a few short examples, since a deeper exploration of the literature in this area is beyond the scope and purpose of this work. In her doctoral thesis, Takano [5] described the process of *bonding* in her cross-cultural examination of the relationship with the land in seven outdoor programs: four in the United Kingdom and three from Indigenous communities in the far north of Canada and Alaska. For the three Indigenous communities in particular, being *on the land* was akin to *life* itself. Henderson and Vikander [6] presented the *friluftsliv* way from both Scandinavian and Canadian perspectives; numerous scholars related personal perspectives in this edited work. For instance, Gelter defined *friluftsliv* as the “interpretation of a way of life in relation to nature, where the interconnectedness and immersion in the natural setting is at the centre of a philosophical experience of nature.” [7, p. 46] Vikander used the terms *deep anchoring* and *embedding* to describe *friluftsliv* and the relationship between a person and a natural setting. [6 p. 10] Henderson described the northern Cree First Nations’ expression, *miyupimaatisiium*, which means “being alive well” with the land. [6 p. 6] Perhaps the concept of connecting is related to *friluftsliv*, Takano’s *bonding*, Vikander’s *deep anchoring* and *embedding*, or the Cree concept of *miyupimaatisiium* and the Anishinabek concept of *Anishinaabe Bimaadziwin*.

Our purpose in this paper is not only to introduce the ways in which the OALE impacted resilience and well-being for Wikwemikong youth, but also to extend and apply our understanding of connecting beyond the context and culture within which it is rooted. We want to reveal how the OALE research reached beyond the youth participants and how their experiences and stories have touched us on a personal level. Although the youth seemed to

benefit from the OALE, the staff, community leaders, and university researchers also seemed to benefit. Often the voice of the researched or the *other* is profiled, however it is also important to hear the voices of researchers and how they were impacted. Research can be a deeply reflexive process and it impacts all who are involved [8]. We would like to share this reflexive perspective through two personal philosophies of connecting through outdoor adventure, since we were intimately involved in the research and specifically in the qualitative analysis. We were impacted, our worldview shifted, and this is our voice.

Stephen's Philosophy of Connecting through Outdoor Adventure

The world is complex. Yet at times, there seems to be a coherence, unity, and harmony in the world when I am immersed in wilderness environments. I seem to perceive this coherence best during times of heightened involvement in adventurous outdoor activities. During these times of challenge, I am alert and even more connected and engaged in an awe-inspiring created world. To me, complexity, coherence, and creation are best represented by the sublime simplicity of the circle.

In Anishinabek teaching, the circle is sacred and symbolic, representing the connections we all have with each other and the natural world. [4] It also represents completeness, in that everything has its place in order to complete the circle. Unlike the uniform simplicity of the circle, my perceptions often tend to complicate the world through feeble attempts to understand, compartmentalize, and structure it so that it makes sense to me. Through these attempts, I am usually left with an empty feeling that my efforts are futile and never to be fulfilled, that my potential to perceive is limited, and that the extent of my capacity as a human is only to intuitively grasp a marvelous and mysterious world that fits and functions through its complexity. However, when engaged in outdoor adventure, I have an innate capacity to sense completeness, a

connection amongst people, across species, and inclusive of the entire natural world. The circle is my metaphor that makes meaning of this complexity.

Outdoor adventure embodies a connection with *self* and *creation*. Connecting with self provides innumerable introspective opportunities for me. I am able to explore and understand more of who I am, and how and why I act the way I do. I am able to perceive and regulate my emotions, attitudes and behaviours. Often I develop a clarity of purpose and personal resolve that is motivating, addictive, and immensely satisfying: to climb the summit OR paddle the rapid... I discover the real me. Connecting with creation allows me to see glimpses of our complex world through powerful linkages that intuitively and instinctively make sense, despite the magnitude and extent of the unknown. For instance, I feel and share the warm sun with others, a sun that provides me and my friends warmth and light for direction, and at the same time the energy required for photosynthesis in plants – and these same plants may become my food or shelter, or the food and shelter for other animals. I believe that the natural world was created, and it embodies all that is not me: people, animals, plants, elements, world, and universe. In short, outdoor adventure is the medium through which I connect more completely with myself and with creation.

As I contemplate a created world that I best perceive and understand through outdoor adventure, I am also reminded that I live in an imperfect broken world, and that I am imperfect. I am selfish and a sinner, and I negatively impact the environment and the world I live in. Connecting through outdoor adventure has a dark shadow that is a broken circle. As I actively engage in wilderness environs, I am aware of my selfish desires, my sinful nature, and the footprint I leave on the earth. Connection with self and others is contrasted with a fragile me and a fragile earth.

Fortunately, the Creator is in control. He sent his one and only son to save me and the earth. My connections are complete through Christ. The Creator and Christ complete and connect the circle: a realization that comes to me through outdoor adventure pursuits.

Danielle's Philosophy of Connecting through Outdoor Adventure

Connecting is the invisible string that ties everything to everything else. I like to experience the world through contact with the earth – with others, and with the dirt and the soil. By embracing and connecting with the earth and with others through outdoor adventure, a new fresh perspective waits to be seen. Fostering connection with the world allows well-being to blossom. For me, loving God and others is a part of my faith that inspires me to strive to act intentionally. This past year I have been learning, reflecting, and synthesizing my personal philosophy which I had the great opportunity to share in the classroom. I have been able to pull my thoughts together and explore how my value of loving God and others materializes through sharing and fostering connection, especially through discovery and adventure in the outdoors.

I choose to act in ways that connect me with the place where I am, and this creates a sense of belonging. Personally, I feel most connected when I am out in creation. It is in creation that I am reminded of, and become fully aware of my vulnerability. I can feel the importance of interdependence in my small yet valuable part of the world. Out of this belonging I am compelled to care, and thus the bond grows stronger. Connecting gives my life meaning and, at the same time, seems to enhance the well-being of the social and ecological community that surrounds me.



Figure 1: Deep care and connecting through outdoor adventure

I find great satisfaction when I can embrace a challenge and do or make something myself. I love to spend time outside, to discover the long way, to understand and participate in the processes of life. This desire to discover is what I think children naturally have. I think that through sharing experiences and stories with children, and by encouraging and allowing them to discover how they are connected to the world around them, room is made for invaluable learning to take place. I like to think of this act of helping others to connect as *deep care*.

Figure 1 illustrates the *meaning* and *belonging* that deep care and connection bring. The circle shows how gifts and needs meet and overlap, creating that connection. When I am removed from the process, the face-to-face interaction and the understanding of where I fit into the larger context, I no longer feel like a contributing part of the whole circle. Belonging and understanding my role in the world gives me meaning and compels me towards responsibility and good work. Outdoor adventure within a group context is an example of an activity where

powerful connection is experienced. In these adventures and journeys, I rely on my peers to live, and I work with all of Creation in harmony. I am needed, I need others, and I need the environment; therefore I must act respectfully and find my place in the circle. I believe that outdoor adventure experiences are meaningful because they leave a magnified impression on the souls of the group members. Outdoor adventure experiences cause me to see and seek harmony and find connections in other areas of my life. In a similar way, these connections may provide inspiration and positive therapeutic effects for others as they engage in activities together.

Conclusion and Implications

We realize that these personal philosophies are intimate, unreserved, and private; however we are hopeful that by sharing them, they are respected and resonate with some readers and perhaps trigger an unrelated personal response in others. Connecting through outdoor adventure may not be a concept, philosophy, or framework that is shared by everyone that engages in outdoor activities, but it may offer an explanation for the allure of the wild for some. Finally, we would like to challenge our readers and their students to write their own outdoor related philosophy as we have done. The philosophy could be a reflection on environmental ethics, self-propelled travel, non-consumptive experiences, or any of the myriad of factors that may be important to an individual in their outdoor pursuits. Alternatively, it could be related to a single concept such as connecting. Keep it to one page.

Acknowledgements: We would like to acknowledge the 73 youth who participated in the OALE over the past two summers. They are our future leaders of tomorrow and helped us understand more about connecting through outdoor adventure. We would also like to acknowledge Wikwemikong Chief and Council, members of the Health Services Committee, staff at the Waasa

Naabin Youth Services Centre, and members of the Community Research Steering Committee who guided our project from inception.

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Appendix K: Video Documentary Synopsis and Credits for *The Journey Home: The Outdoor Adventure Leadership Experience*

The Journey Home: The Outdoor Adventure Leadership Experience **11 min 30 sec film documentary**

Synopsis

The Journey Home is the story of the Wikwemikong Outdoor Adventure Leadership Experience (OALE). The OALE is a ten-day outdoor program designed to promote resilience and well-being for First Nations Youth ages 12-18 from the Wikwemikong community. Filmed in Wikwemikong Unceded Indian Reserve on Manitoulin Island in Northern Ontario, this documentary captures the impact of a culturally relevant outdoor experience as youth travel homeward after canoeing through their traditional territory. The experience helps youth discover their identity by reconnecting with nature, culture, and community. The OALE was developed collaboratively between community leaders from Wikwemikong and researchers from Laurentian University in Northern Ontario, CANADA.

Online Links (available for viewing): www.oalevideo.laurentian.ca and http://www.youtube.com/watch?v=Uld5b3cZ_eg

Year Produced: 2010

Year Released: 2010

Film Credits and Acknowledgements

Collaboration Between:

Nahndahweh Tchigehgamig Wikwemikong Health Centre and the Waasa Naabin Youth Services Centre, Wikwemikong, Ontario

AND

Laurentian University, Sudbury, Ontario

Filmmaker and Director:

Dr. Hoi F. Cheu

Laurentian Film Studio, Director

Laurentian University

Co-Producers:

Stephen D. Ritchie

Assistant Professor, Outdoor Adventure Leadership Program

School of Human Kinetics AND

PhD Candidate

School of Rural and Northern Health

Laurentian University

Mary Jo Wabano

Health Services Director

Nahndahweh Tchigehgamig

Wikwemikong Health Centre

Lawrence Enosse

Brighter Futures Manager

Waasa Naabin Youth Services Centre

Cinematography:

Brian Burford, first camera

Hoi F. Cheu, second camera

Stephen D. Ritchie, photography

Cast (in order of appearance):

Mary Jo Wabano

Stephen Ritchie

Sheldon Manitowabi

OALE Participant, 2009

Age: 13 (at time of OALE experience) and 14 (at time of video on July 30, 2010)

Ashlay Jacko

OALE Participant, 2009

Age: 15 (at time of OALE experience) and 16 (at time of video on July 30, 2010)

Hazel Fox-Recollet

Chief, Wikwemikong Unceded Indian Reserve

Music:

Flute: Flute music improvised by Hoi F. Cheu based on theme “Keewetinohk;” played by David Buley

Drums: Chippewa Travellers and Rocky River: Members from both these drum groups played on July 30, 2010 (day of filming arrival scene)

Wikwemikong Future Leaders....***OALE Participants 2009***

Anthony George, Jessica Trudeau, Marshall Flamand, Elijah Roy, Moirah Shawana, Mark Roy, Kalyne Beaudry, Sheldon Bondy, Lance Gaiashk, Keaton Francis, Shaneka Manitowabi, Issac Wemigwans, Dillon Ominika, Harmony Eshkawkogan, Tasheena Recollet, Pierce Wemigwans, Darren Lavallee, Andrew Lavallee, Hillary Pangowish, Tyler Dokumm, Courtney Recollet, Raven Manitowabi, Deyanehra Dokum, Melissa Richard, Tyler Aiabens, Axl Enosse, Ashlay Jacko, Henry Earle, Mercedes Jackson, Wilfred Rivers, Gillian Ominika, Alvin Enosse, Katie Ominka, Jules Shawanda, Dezarae Wemigwans, Winona Ominika, Daniel Lewis, Jared Debassige, Pierce Manitowabi, Alec Shawana, Sheldon Manitowabi, Ryan Peltier, Anthony Manitowabi

OALE Participants 2010

Aaron Manitowabi, Brandon Pangowish, Adam Maiangowi, Alexandra Wemigwans, Darcy Osawamick, Deyanehka Dokum, Brandon Shigwadja, Dillan Peltier, Brianna Constantin, Jerry Wemigwans, Brooke Wakegijig, Karlene Fox, Mukwoos Eshkibok, Brooke Williams, Rita Manitowabi, Dalton Mishibinijima, Levi Shawana, Victor Eshkibok, Dalton Shawana, Mason Peltier, Jade Ominika, Neeganii Lavell, Peter Jacko, Eric Cooper, Hawk Recollet, Tacie Peltier, Ian Manitowabi, Tyler Pangowish, Kaella Earle, Zachery Fox, Sammy Peltier, Moirah Shawana, Isaac Wemigwans, Keaton Francis, Isaac Wemigwans, Winona Ominika, Sheldon Manitowabi, Katie Ominika, Dillon Ominika

OALE Facilitators:

Duke Peltier, Philip Green, Nimkii Lavell, John Dube, Leanne Mishibinijima, Lyle Peltier, Amy Assinewai, Graham Trudeau, Tim Christopher Peltier, Quentin Peltier, Alycia Shawana, Sabrina Shawanda, Zakkary Shawanda, Sheena Wassegijig, Susan Griffin, Brian Pitawanakwat, Tyrone Shawana, Aldophus Recollet, Jerome Kanasawe, Shaneece Manitowabi, Tasha Richards, Adrianna Osawamick, Danielle Shawana-Trudeau, Christina Shawongonabe, Lynette Odjig, Marcie Tabobondung, Dana Cooper, Alycia Shawana, Kaella Earle, Jessica Mae Manitowabi, Brandon Ominika, Dana Ominika, Ryan Peltier

Shuttle Service:

Wikwemikong Lands & Resources Department
Wasse-gizhig Tours & Accommodations

Elders:

Rita Corbiere, Albert Peltier, Joseph Corbiere, Clyde Migwans, Roland Manitowabi

Wikwemikong Members of Council:

Margaret Manitowabi (Health Portfolio), Duke Peltier (Education Portfolio)

Wikwemikong Community Research Steering Committee:

Mary Jo Wabano, Lawrence Enosse, Duke Peltier, Rita Corbiere, Daniel Manitowabi, Diane Jacko, Rosella Kinoshameg, Amanda Richards, Cody Wassengeso-George, and Pierce Wemigwans.

Research Focus Group Members:

(1) Amikook Seniors Centre; and (2) staff from the Nadmadwin Mental Health Clinic, and the Waasa Naabin Youth Services Centre.

Stephen Ritchie's PhD Committee & Research Collaborators:

Nancy Young PhD (Supervisor)
Brenda Restoule PhD
Keith Russell PhD

Organizational Support and Funding:

First Nations and Inuit Health Branch, Health Canada
Indigenous Health Research Development Program
Canadian Institute of Health Research
Social Sciences and Humanities Research Council of Canada
School of Rural and Northern Health, Laurentian University
Outdoor Adventure Leadership Program, Laurentian University
Evaluating Child Health Outcomes (ECHO) Research Centre, Laurentian University
Wikwemikong Development Corporation
Wikwemikong – Ontario Works

Appendix L: Copyright Releases and Permissions for Papers



Permission Request for Copyrighted Material

Date: April 4, 2013

Name (of person filing request): Stephen D. Ritchie

Organization or Company (include address & phone): Laurentian University, 935 Ramsey Lake Road, Sudbury, Ontario P3E 2C6, CANADA

Selected Material: One paper (SEER Abstract) from 2010, Volume 32, Issue 3, P. 300-304 that I am first author on.

Original Publication(s) Title and Date: Here is the full citation:

Ritchie, Stephen D.; Wabano, Mary Jo; Young, Nancy; Schinke, Robert; Peltier, Duke; Battocchio, Randy; Russell, Keith. (2010). Developing a Culturally Relevant Outdoor Leadership Training Program for Aboriginal Youth. Journal of Experiential Education. 2010, Vol. 32 Issue 3, p300-304.

For (class, research, etc.): I am a PhD candidate, and I would like to include this paper in my thesis since I am completing an "integrated paper-based thesis" in the School of Rural and Northern Health.

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April 10, 2013

Stephen Ritchie
1311 Lakewood Drive
Sudbury, Ontario
P3E 6H9
CANADA

Dear Stephen,

I have received your request for copyright release permission for the following Pathways papers:

Ritchie, S. D., Enosse, L., & Peltier, J. (2013). Frameworks for adventure: The Outward Bound process and the medicine wheel. *Pathways: The Ontario Journal of Outdoor Education*, 25(3), in press.

Ritchie, S. D., Brinkman, D. G., Wabano, M. J., & Young, N. L. (2011). Reflections on connecting through outdoor adventure. *Pathways: The Ontario Journal of Outdoor Education*, 23(4), 4-9.

It is my understanding that you would like to include these papers in your PhD thesis. I grant permission for you to include these two papers in your thesis with full referencing given as indicated above.

Sincerely,

A handwritten signature in black ink that reads "Robert J. Henderson". The signature is fluid and cursive, with the first name "Robert" and last name "Henderson" clearly legible.

Robert Henderson, PhD
Editor, Pathways Journal
Council of Outdoor Educators of Ontario

April 16, 2013

Stephen Ritchie
1311 Lakewood Drive
Sudbury, Ontario
P3E 6H9
CANADA

Dear Stephen,

I have received your request for copyright release permission for the following paper you submitted for publication in the proceedings from the 5th International Adventure Therapy Conference in Edinburgh, Scotland:

Ritchie, S. D., Wabano, M. J., Schinke, R., Peltier, D., Restoule, B., Russell, K., . . . Young, N. (2012). The Aboriginal youth resilience study: A look at promoting resilience and well-being through outdoor adventure leadership experience. In A. Pryor, C. Carpenter, C. L. Norton & J. Kirchner (Eds.), *Emerging insights: Proceedings of the 5th International Adventure Therapy Conference 2009* (pp. 145-162). Prague: European Science and Art Publishing.

It is my understanding that you would like to include this paper in your PhD thesis. As I am not a representative for the publisher, I cannot provide you formal copyright permissions, however I have contacted the other three co-editors concerning your request. I have heard back from two of them. Hence, as a majority, we are supportive of you including this paper in your thesis.

Sincerely,

A handwritten signature in black ink, appearing to be 'AP', with a long horizontal stroke extending to the right.

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